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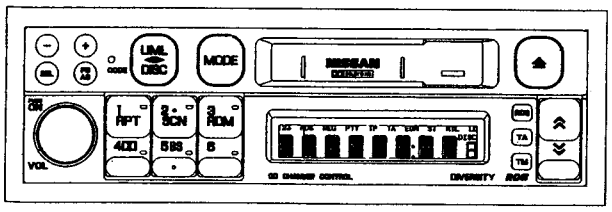
clarion Service Manual

Published by Service Information Section



NISSAN Automobile Genuine RDS/FM • MPX/MW/LW Radio Cassette Stereo with CD Changer Control

Model PN-9728F

(Genuine No. 28113 86J10)

■ SPECIFICATIONS:

[Radio section]

Circuit system:	Superheterodyne
Tuning system:	Electronic tuning
Receiver range:	LW 153kHz to 279kHz
	MW 531kHz to 1,602kHz
	FM 87.5MHz to 108MHz
Intermediate frequency:	LW 450kHz
	MW 450kHz
	FM 10.7MHz
Quieting sensitivity:	LW Less than 42dB (at 20dB S/N)
	MW Less than 35dB (at 20dB S/N)
	FM Less than 12dB (at 30dB S/N)
Separation:	FM More than 20dB
Auto tuning stop sensitivity:	
	LW DX 20~46dB
	LO 45~66dB
	MW DX 20~46dB
	LO 45~71dB
	FM DX 10~30dB
	LO 35~55dB

[Tape section]

Reproduction system:	4 track, 2 channel stereo cassette tape playback
Tape speed:	4.76cm/sec (1-7/8 ips)
Wow and flutter:	0.15% (W.R.M.S)
S/N ratio:	More than 56/47dB, Dolby B ON/OFF (120 μs)
	More than 58/50dB, Dolby B ON/OFF (70 μs)
Cross talk:	More than 40dB
Separation:	More than 30dB
FF/REW time:	Less than 130sec. (C-60)

[Synthesis]

Power Supply voltage:	DC 13.2V (10.8V to 15.6V) Negative ground
Current consumption:	Less than 3mA (at ACC OFF)
Load impedance:	4Ω×4
Quieting power output	More than 8W×4
Dimensions:	Width 180mm
	Height 50mm
	Depth 160mm
Weight:	1.5kg

■ COMPONENTS:

- **PN-9728F-A**
  Main unit

• Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
• "DOLBY" and the double-D symbol ⊡ are trademarks of Dolby Laboratories Licensing Corporation.

■ ANTI-THEFT-SYSTEM:

·Releasing the ANTI-THEFT SYSTEM (When reinserting the car stereo or reconnecting the battery.)
1. Make the necessary wire connections.
2. Turn on POWER switch. ("CODE IN"is displayed.)
3. Using PRESET button 1 to 6, input the sicuret number.

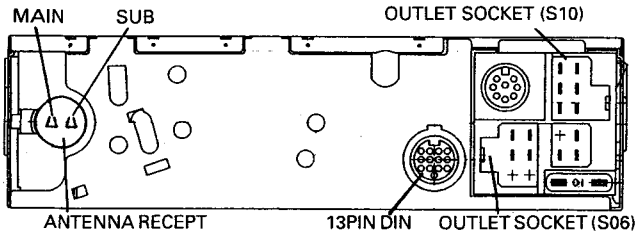
After the last code number is entered the radio will operate.

·In case the wrong code was entered.
1. Finish entering all four digits.
2. Press UNL(BAND select) button for appreximetely two seconds.
3. Input the correct code.

·Waitting time for releasing the ANTI-THEFT SYSTEM (If the wrong code was entered at three times.)
1. Wait for more than an hour at the necessary wire connections.
2. Press UNL(BAND select) button for two seconds.
3. Input the correct code.

■ REAR VIEW • CONNECTIONS:

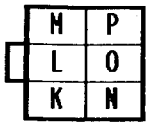
REAR VIEW



13PIN DIN (FOR CD A/C)

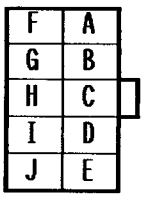
1. SO/SI	8. Rch Input
2. SCK	9. -
3 -	10. Back Up
4. SRQ	11. ACC Control
5. -	12. GND
6. Signal GND	13. -
7. Lch Input	

S06



K. -	
L. Rear sp Lch(+)	
M. Rear sp Rch(+)	
N. -	
O. Rear sp Lch(-)	
P. Rear sp Rch(-)	

S10



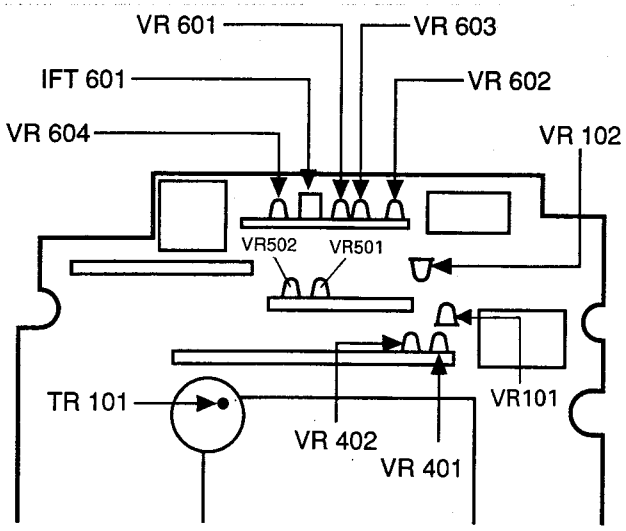
A. Front sp Lch(+)	G. Front sp Rch(-)
B. Front sp Rch(+)	H. Ant. Signal
C. Back Up	I. -
D. Lighting Switch	J. GND
E. ACC	
F. Front sp Lch(-)	

■ ADJUSTMENT:

Adjustment item	Adjustment point	Procedure
0V	IFT601	1. Connect the digital volt-meter to TP3 and TP4. 2. Input the 98.1MHz/30dB signal(no MOD), and adjust the reading of digital volt-meter to 0±20mV by IFT601.
Limiter	VR602	1. Input the 98.1MHz/65dB signal(400Hz MOD). [Output:0dB(0.775V)] 2. Set the SSG output to 10dB, and adjust the output level to -3dB by VR602.
SD	VR601	1. Connect between TP11 and TP10(5V). 2. Input the 98.1MHz/28dB signal(1KHz 30% MOD). 3. Adjust VR601 so that the voltage of TP5 is in the range 0V to 5V.
Diversity sens.	VR101	1. Connect the digital volt-meter to TP7 and GND. 2. Input the 98.1MHz/20dB signal(no MOD), and adjust the level to 1.0±0.1V by VR102.
S-meter	VR102	1. Connect the digital voltmeter to TP6. 2. Input the 98.1MHz/35dB signal(1KHz no MOD). 3. Adjust the level to 2.4±0.1V by VR102.
SASC	VR603	1. Input the 98.1MHz/65dB signal(7KHz 30% MOD). 2. Set the output to 0dB by VR603 fully counter-clockwise. (0.775V) 3. Set the SSG output to 43dB, and adjust VR603 so that the output level is -2dB.
Separation	VR604	1. Input the 98.1MHz, connect the output of a stereo modulator to the external modulation terminal, and input a 65dB signal. 2. Set the stereo modulatior to the L or R-ch and adjust VR604 so that the maximum separation is obtained. (More than 20dB)
CW (Carrier wave)	VR501	1. Connect the mill volt-meter to TP8. 2. Input the 98.1MHz/65dB signal(100Hz, MONO) and adjust the level to 1.77V±1dB by VR501.
DK	VR502	1. Input the 98.1MHz/55dB signal (no MOD, SK DK on) 2. Connect the oscilloscope to TP9, and adjust VR502 so that the oscilloscope output waveform is maximum.
Tape speed	TR101	1. Insert a tape speed test tape (3000Hz). 2. Adjust the tape speed to 3000±45Hz by TR101.
Dolby NR	VR401, VR402	1. Insert a Dolby level test tape (400Hz-200nWb/m), connect the mill-volt meter to TP1(L) and TP2(R). 2. Adjust VR401(L) and VR402(R) to obtain an output of 388mV±1dB.

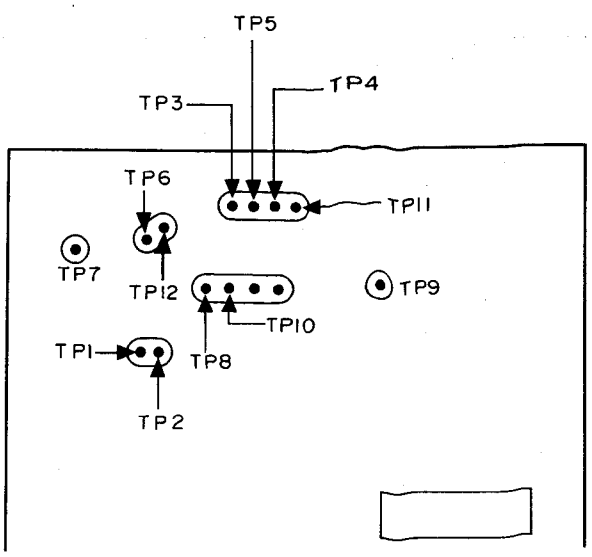
Adjustment point/test point

Top view



MAIN PWB

Bottom view



MAIN PWB

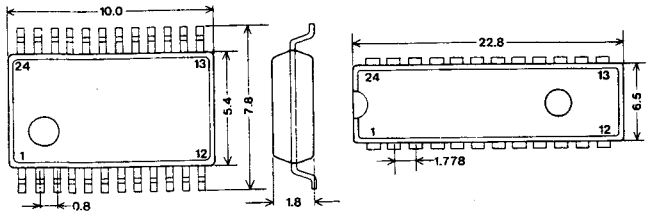
*DIVER FIX(MAIN):Connect TP12 to earth.

■EXPLANATION OF IC's:

※IC's other than explained below are described in Service Manual 「EXPLANATION OF IC's」 Vol.2～Vol.4.

■BA3430FS 051-1546-00 / BA3430S 051-1546-10 Dual Preamplifier with AMS

Outward Form



BA3430FS　　BA3430S

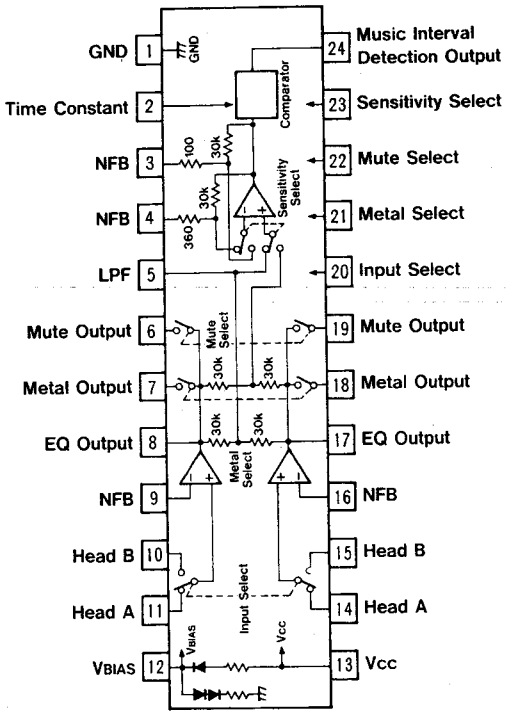
Outline

This IC is a stereo preamplifier with a music interval detection circuit, developed for car stereos.

Features

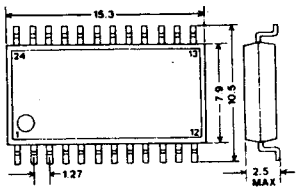
1) An auto reversing input COS circuit is built in.
2) Also builtin is a time constant COS circuit for metal tape.
3) Also contained is a mute circuit.
4) A circuit for selecting the sensitivity of the music interval detection circuit is built in.
5) No error operation due to noise occurs during quick feed, because the music interval detection circuit can incorporate a lowpass filter.

Block Diagram

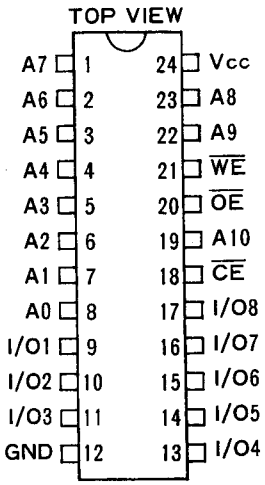


■LC3517BML-12 051-1046-46 2048ward×8bit static RAM

Outward Form

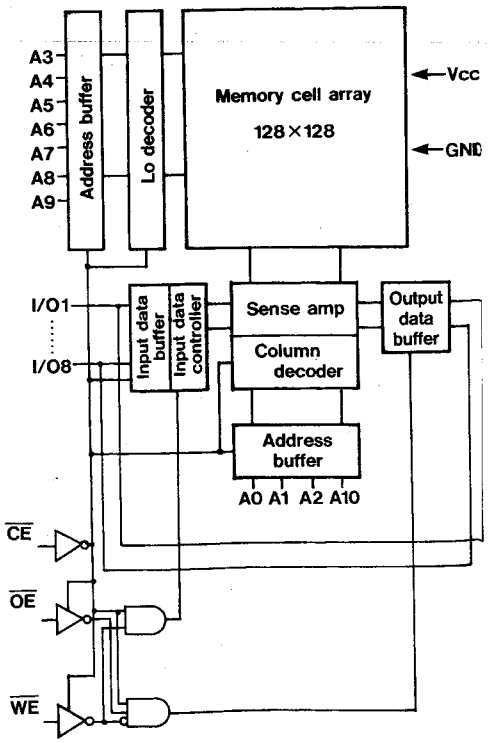


Terminal Connection



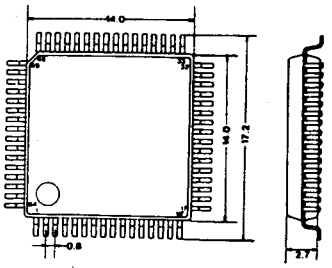
A0～A10	Address input
$\overline{WE}$	Read write control input
$\overline{OE}$	Output enable input
$\overline{CE}$	Chip enable input
I/O1～I/O8	Data I/O
Vcc/GND	Power Supply

Block Diagram



■LC7582E 051-0836-10 Driver For LCD-Display

Outward Form



Features

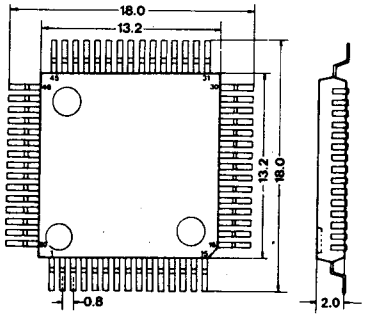
- LC7582E is LCD-driver by micro-computer control or frequency display of electronic tuning.
- Driving system is made up of 1/1 duty (53 segments) and 1/2 duty (104 segments).
- Data input is made with serial-in 3 pcs.
- 5-level AD-converter is provided with 2 terminals. (as with level-meter use)
- Display for direct expression (DSP) with 2 terminals.
- With $\overline{INH}$ terminal for putting out the display.

Terminal Function Table

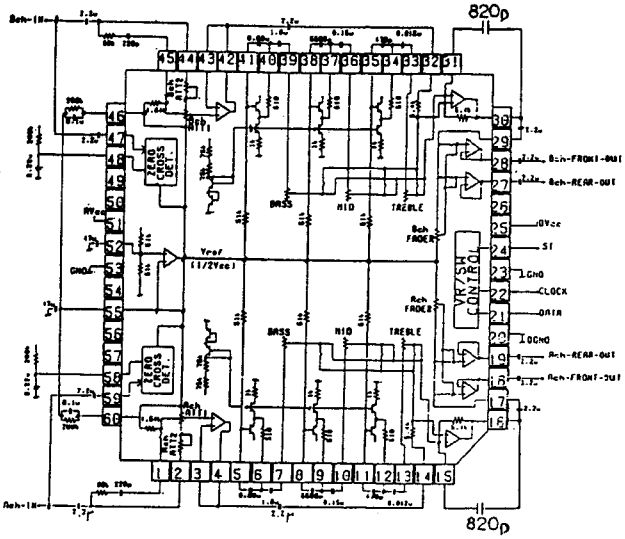
Pin No	Terminal Name	Function
1 - 23	S1 - S23	Segment output terminal.
25 - 44	S24 - S43	
24	OPEN	NC
45	S44(DSP2)	Segment output or DSP input.
47	S46(DSP1)	
46	S45(AD2)	Segment output or AD input.
48	S47(AD7)	
49	S48(DSP OUT)	Segment output or DSP output.
50	S49(AD 01)	Segment output or AD output.
54	S53(AD 05)	
55	OSC	Oscillation terminal.
56	V_{DD}	Power supply terminal.
57	$\overline{INH}$	Display-putting off input terminal (It is effective for output driver alone, thus it is possible to transfer the serial data during the putting-out of lamp).
58	V_{LCD}	LCD Bias voltage terminal.
59	GND	Ground.
60	CE	Input terminal for transferring the serial data.
61	CLK	
62	DATA	
63	COM2	Common output terminal. (Using COM1 alone at time of 1/1 duty)
64	COM1	

■M51139FP 051-1818-00 ELECTRONIC VOLUME WITH TONE CONTROL

Outward Form

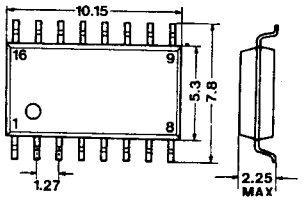


Block Diagram

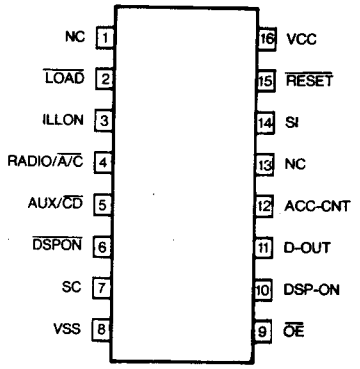


■MB88307APFG 051-1345-15 Shift register/latch driver

Outward Form



Terminal Connection

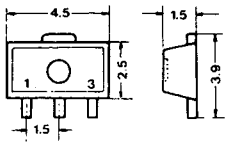


Terminal Description

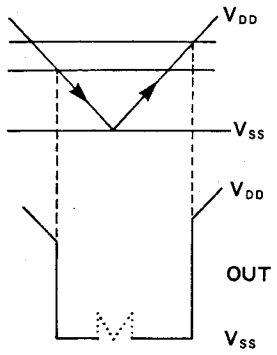
Pin No.	Symbol	I/O	Function
1	NC	O	Not in use.
2	$\overline{LOAD}$	I	A terminal which outputs serial data latch.
3	ILLON	O	Switching ILLUMI terminal ("H→GREEN).
4	RADIO/$\overline{A/C}$	O	Switching amp radio or CD A/C (ACCS).
5	AUX/$\overline{CD}$	O	Switching amp AUX (RADIO/A/C) or CD.
6	$\overline{DSPON}$	O	DSP connection mode : "L".
7	SC	I	A terminal which inputs serial clock.
8	VSS	–	GND terminal.
9	$\overline{OE}$	I	A terminal which controls output latch data.
10	DSP-ON	O	DSP connection mode : output "L".
11	D-OUT	O	Switching digital or analog (CD A/C Audio signal).
12	ACC-CNT	O	C-BUS ACC CONT.
13	NC	O	Not in use.
14	SI	I	A terminal which inputs serial data.
15	$\overline{RESET}$	I	Reset terminal.
16	VCC	–	Power voltage terminal (+5V).

■S-80740AN-D4-X 051-1556-05 C-MOS Voltage

Outward Form



Time Chart

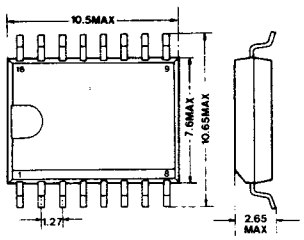


Electrical Characteristics (Ta=25°)

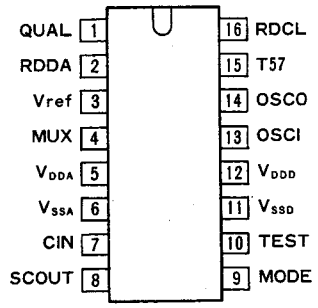
Item	Symbol	Min.	Typ.	Max.	Unit
Detect voltage	V_{DET}	3.904	4.000	4.096	V
Operating voltage	V_{DD}	1.0	–	15.0	V

■SAA6579T 051-1819-00 Radio data system demodulator (RDS)

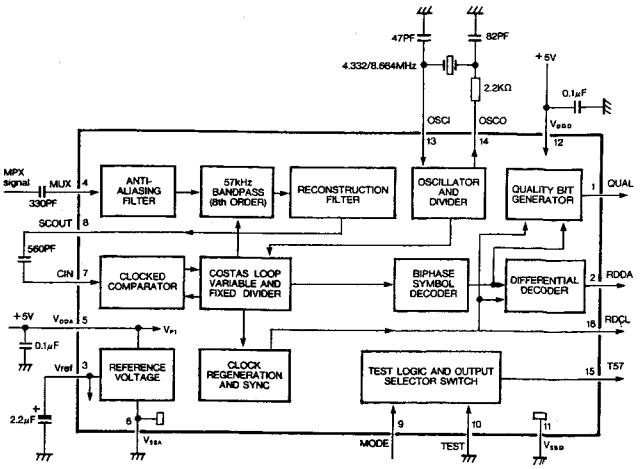
Outward Form



Terminal Connection



Block Diagram



Via the pin MODE two different crystal frequencies can be used:

MODE	x-tal clock
LOW	4.332MHz
HIGH	8.664MHz

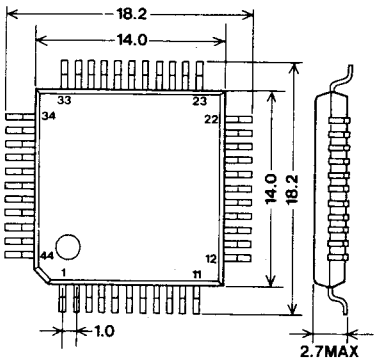
Terminal Description

Pin No.	Symbol	Description
1	QUAL	Quality indication output
2	RDDA	RDS data output
3	Vref	Reference voltage output ($0.5V_{DDA}$)
4	MUX	Multiplex signal input
5	V_{DDA}	+5V supply voltage for analog part
6	V_{SSA}	Ground for analog part (0V)
7	CIN	Subcarrier input to comparator
8	SCOUT	Subcarrier output of reconstruction filter
9	MODE	Oscillator mode / test control input
10	TEST	Test enable input
11	V_{SSD}	Ground for digital part (0V)
12	V_{DDD}	+5V supply voltage for digital part
13	OSCI	Oscillator input
14	OSCO	Oscillator output
15	T57	57kHz clock signal output
16	RDCL	RDS clock output

■TA8172AF 051-1525-00 FM PROCESSOR

This IC is a FM tuner IC, which is integrated from IF to MPX stages into one chip.

Outward Form



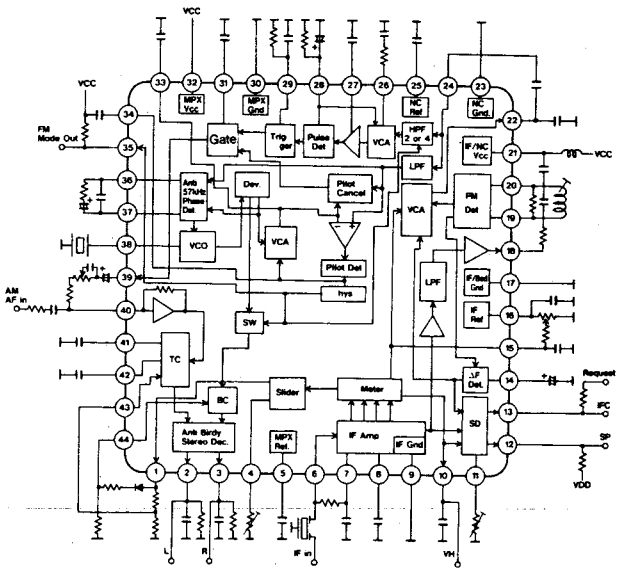
Function

IF.....IF limiter amplification/differential peak FM detection/signal meter/electric field strength muting/detuning muting/station detection/IF counting request.

NC .....Noise detection/noise AGC/noise pass filter/noise pass filter wave changeover/signal delay/unadjusted pilot cancellation/signal holding.

MPX .....Unadjusted PLL method stereo decoder/blender control/tone control (low-cut, high-cut)/anti-ARI/anti-birdie.

Block Diagram

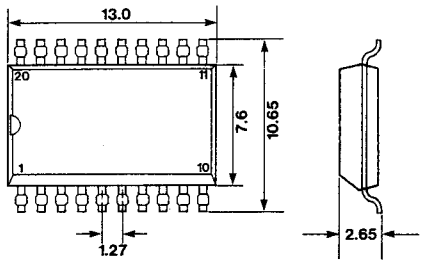


Terminal Connection

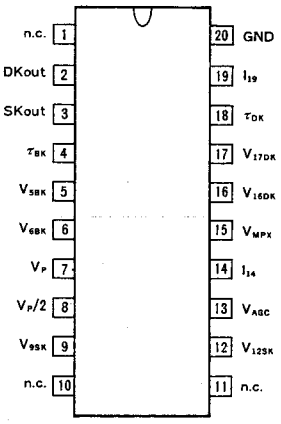
Pin No.	Symbol	Function
1	SO	Slider output terminal.
2	L out	MPX output terminal.
3	R out	
4	Slide	Blender of MPX unit, controllable range setting terminal for electric field strength of tone.
5	Ref. 3	3rd nominal voltage terminal.
6	IF in	IF amp. input terminal.
7	Bias	Provide bias to 6th pin via R.
8	By 1	IF amp. bypass terminal.
9	G 1	IF amp. ground terminal.
10	Meter	Meter output terminal in FM mode, and meter input terminal for slider circuit in AM mode.
11	SD	Sensitivity setting terminal of station detector.
12	SP	Pulse counting output terminal stopped by station detector.
13	IFC	IF counting output terminal.
14	ΔF	ΔF detector output smoothing terminal.
15	SM	Soft-mute characteristic setting terminal.
16	Ref 1	1st nominal voltage terminal.
17	G 4	Sub-straight ground terminal.
18	IF out	IF limiter amp. output terminal.
19	Det 1	Input terminal of differential peak detection.
20	Det 2	
21	B 1	Power terminals of IF and noise canceler units.
22	AF out	Audio signal output terminal.
23	G 2	Ground terminal.
24	NC in	Input terminal of noise canceler unit.
25	Ref 2	2nd nominal voltage terminal.
26	By 2	AGC amp. bypass terminal of noise canceler unit.
27	By 3	Noise amp. bypass terminal of noise canceler unit.
28	AGC	Noise AGC time-constant setting terminal of noise canceler unit.
29	PW	Trigger-pulse range setting terminal of noise canceler unit.
30	G 3	Ground terminal of MPX unit.
31	Gate	Composite signal holding gate terminal of noise canceler unit.
32	B 2	Power terminal of MPX unit.
33	P	Canceling signal output terminal for pilot cancellation.
34	PD3	Output terminal of pilot detection circuit.
35	Mode	Mode output terminal of stereo/mono selection.
36	PD1	Output terminal of phase detection circuit.
37	PD2	
38	VCO	VCO circuit oscillation terminal.
39	NC out	Noise canceler output terminal.
40	MPX in	MPX input terminal.
41	LC	Cut-off frequency setting terminal.
42	HC	
43	TC	Tone-control (low-cut, high-cut) control terminal.
44	BC	Blender control terminal.

■TDA1581T 051-1817-00 Decoder for traffic warning radio transmissions

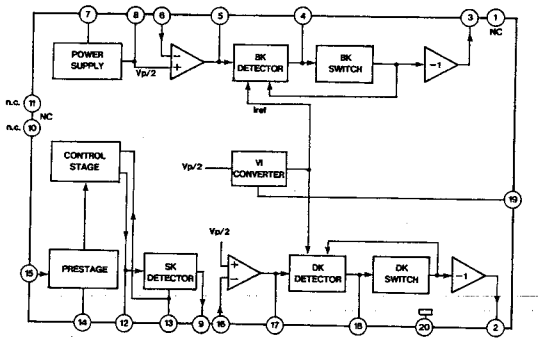
Outward Form



Terminal Connection



Block Diagram



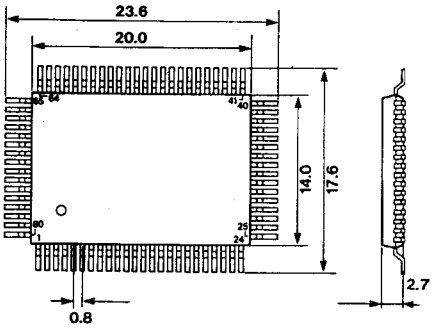
Terminal Description

Pin No.	Symbol	Description
1	n.c.	Not connected
2	DKout	DK output current
3	SKout	SK output current
4	τ_{BK}	Time delay BK
5	V_{5BK}	Filter output BK
6	V_{6BK}	Filter input BK
7	Vp	Supply voltage
8	Vp / 2	Half supply voltage
9	V_{9SK}	SK detector output
10	n.c.	Not connected
11	n.c.	Not connected
12	V_{12SK}	57kHz band pass filter
13	V_{AGC}	AGC
14	I_{14}	Prestage biasing current
15	V_{MPX}	MPX input
16	V_{16DK}	Filter input DK
17	V_{17DK}	Filter output DK
18	τ_{DK}	Time delay DK
19	I_{19}	Reference current for BK, DK detector
20	GND	Ground

■μPD17006AGF-616-3B9 052-1103-00 / μPD17006AGF-610-3B9 051-1812-00 Tuner Controller

※052-1103-00 is a performance improved device of 051-1812-00.

Outward Form



Terminal Description

Pin No.	Symbol	I/O	Function
1	$\overline{ST}$ IND	I	FM station stereo signal input pin.
2	$\overline{RDS}$ IND	I	RDS station signal input pin from the RDS decoder IC.
3	$\overline{SK}$ IND	I	Traffic information station signal input pin for ARI broadcasting from the RDS decoder IC.
4	$\overline{DK}$ IND	I	Announcement signal input pin for ARI broadcasting from the RDS decoder IC.
5	CW IN	I	Audio signal input pin.
6	V SM	I	Electric field intensity (S-meter) input pin.
7	FM IF	I	FM intermediate frequency input pin.
8	AM IF	I	AM intermediate frequency input pin.
9	RDS DATA	I	RDS data from the RDS decoder IC.
10	NC	–	Unused.
11	$\overline{RDS}$ CLK	I	RDS clock pin from the RDS decoder IC.
12	RDS GRP DET	O	RDS group synchronization/asynchronization detection pin ("H" at RDS decoder lift reset, "L" at group synchronization).
13	RDS MUTE	O	"H" output for 1 sec. at FM power-on, "H" at MW/LW.
14	VDD	–	Supply voltage pin.
15	AM OSC	I	AM VCO input pin.
16	FM OSC	I	FM VCO input pin.
17	GND	–	GND pin.
18	EOBST	O	PLL error out boost output.
19 20	EO0 EO1	O	PLL error out output.
21	LW/$\overline{MW}$ FM	O	LW select pin.
22	REM	O	System power control pin.
23	PI OK DET	O	PI code definition detection pin ("H" at RDS decoder lift reset, "L" at PI definition).
24	$\overline{MUTE}$	O	Audio mute output pin.
25 26	$\overline{AM+B}$ $\overline{FM+B}$	O	AM/FM power control pin.

	FM	MW	LW
FM+B	0	1	1
AM+B	1	0	0
LW/MW FM	0	0	1

27	LPF CONT	O	PLL low-pass filter control pin.
28	TB	I	Time base.
29	$\overline{BU\ DET}$	I	Backup OFF detection pin.
30	VDD	–	Supply voltage pin.
31	CE	I	Chip enable.

Pin No.	Symbol	I/O	Function
32	HRAM	O	External SRAM address output.
33	GND	–	GND pin.
34 35	XOUT XIN	O –	Main clock oscillation pin.
36	CK OUT	O	Internal clock out.
37 ⟆ 44	RAMA7 ⟆ RAMA0	O	External SRAM address output.
45 ⟆ 52	RAMD7 ⟆ RAMD0	I/O	External SRAM data input/output.
53	C-BUS ADDRESS	I	C-BUS address input.
54	C-BUS COMMAND	I	C-BUS command input.
55	NC	–	Unused.
56	C-BUS SI	I	C-BUS SI.
57	C-BUS SO	I	C-BUS SO.
58	C-BUS $\overline{SCK}$	I	C-BUS SCK.
59	C-BUS $\overline{SRQ}$	I	C-BUS SRQ.
60	NC	–	Unused.
61	GND	–	GND pin.
62	$\overline{RAMOE}$	O	External SRAM out enable.
63	$\overline{RAMWE}$	O	External SRAM write enable.
64	VDD	–	Supply voltage pin.
65 66	RAMA9 RAMA10	O	External SRAM address output.
67	NC	–	Unused.
68	$\overline{SRAM\ CS}$	O	External SRAM chip select pin.
69 ⟆ 72	NC	–	Unused.
73	EOBST MODE	I	Error out boost function select pin.
74	TB MODE	I	Timebase output select pin.
75	NC	–	Unused.
76	FM SD	I	FM signal detector.
77 78	$\overline{DX}$/LOCAL RDS DX/LOCAL	O	

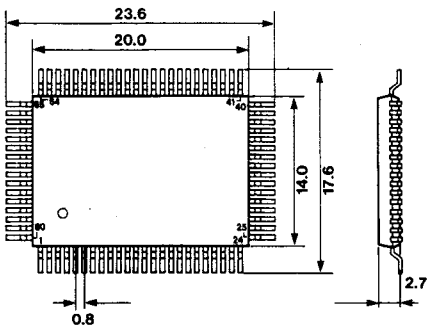
	DX/LOCAL	RDS DX/LOCAL	dB
DX	0	0	20
RDS DX	0	1	30
RDS LO	1	0	45
LO	1	0	45

79	IF REQ	O	IF count request ("H" output only during IF counting).
80	IF MUTE	O	Radio mute output pin (only radio voice muted).

■ **μPD75518GF-141-3B9** **052-3109-00** **System Controller (Master Micro Computer)**
μPD75518GF-097-3B9 **051-1813-00**

***052-3109-00 is a performance improved device of 051-1813-00.**

Outward Form



Terminal Description

Pin No.	Symbol	I/O	Function
1	NC	–	Unused.
2	AVREF	I	A/D conversion reference voltage.
3 4	VDD	–	Supply voltage pin.
5	KS5	O	Key line No. 5 selection output.
6	NC	–	Unused.
7	WF CS	O	E-VOL selection for woofer.
8	NC	–	Unused.
9	A MUTE	O	Audio source mute.
10 11	ASEL1 ASEL2	O	Audio source selection.

Source	ASEL1	ASEL2
Stop	L	L
Radio	L	H
Tape	L	L
A/C	H	L

12	MAIN 5V	O	Power control for peripheral IC. Display driver, C-BUS buffer, rotary encoder, tape mode switch input, A/C CONT, etc.
13	POWER	O	Power control for peripheral IC. LCD, electronic volume, audio source, tape/audio/radio power, antenna.
14	AMP ON	O	Standby reset control for power amplifier.
15	DISP CS1	O	Display driver 1 selection.
16	DISP CS2	O	Display driver 2 selection.
17 18 19	SI SO SCLK	I O O	Data transfer input, output, clock. Display driver used.
20	KS4	O	Key line No. 4 selection output.
21 ⟆ 28	KI7 ⟆ KI0	I	Key scan input pin.
29 ⟆ 32	KS3 ⟆ KS0	O	Key scan signal output pin.
33	GND	–	GND pin.
34	VOL CS	O	Electronic volume.
35	E2PROM CS	O	E2PROM selection.
36 37 38	D-DO D-CLK D-DI	O O I	Used for data output, clock input, electronic volume, E2PROM, and S-PIC.
39	S-PCS	O	Serial/parallel IC selection.
40 41	VOL-A VOL-B	I	Rotary encoder input.
42	MECH POWER	O	Cassette power control, main motor control, power motor, photo reflector.
43 44	SBI ADR SBI CMD	O	Tuner microcomputer SBI function assistance. Controls to allow C-BUS communications.

Transfer type	ADR	CMD
Data	0	0
Command	0	1
Address	1	0

45	BUZZR	O	Buzzer sending output.
46	SLV SRQ	I	C-BUS slave request.
47	MOD KEY	I	Mode select key enable selection. Operation differs between mode select key enabled and disabled when the TOM mechanism is used.
48	BACK UP	I	Vdd power-on detection. Power drop at "L".
49	MECH SEL	I	Tape mechanism selection. H: GFX, L: TOM
50 51 52	SI SO SCLK	I O O	Data input, output, clock. Used for C-BUS communications.
53	ACC ON	I	ACC ON at accessory power detection "H".

Pin No.	Symbol	I/O	Function
54	GND	–	GND pin.
55 56	XT1 XT2	–	System subclock pin.
57	GND	–	GND pin.
58 59	X1 X2	–	System clock pin (4.19MHz).
60	RESET	I	System reset pin.
61	NC	–	Unused.
62	DOLBY	O	Tape Dolby output. Dolby ON at "L".
63	FWD/REV	O	Preamplifier signal switching in accordance with tape running direction. H: REV, L: FWD
64	MECH MUTE	O	Mute and preamplifier gain control at tape running time. H: FF/REW mode, L: Other mode
65	MTL OUT	O	Metal tape switching output. H: Tape running
66 67	P MOTOR 1 P MOTOR 2	O	Tape motor driver control. Controls the operating condition of the GFX mechanism. Control mode / PM1 / PM2 Stop: L / L Loading direction: H / L Ejecting direction: L / H Brake: H / H
68	M MOTOR	O	Tape reel motor control. Motor ON at "H".
69 70 71	MODE SW3 MODE SW2 MODE SW1	I	Detects the tape mechanism mode. Mode / SW3 / SW2 / SW1 EJECT END: H / H / H In LOAD/EJECT: L / H / H STOP: L / H / L –GAP–: H / H / L FF PLAY DIRECTION FF: H / L / L –GAP–: H / L / H REW PLAY DIRECTION FF: L / L / H –GAP–: L / L / L FF PLAY DIRECTION PLY: H / L / L –GAP–: H / L / L REW PLAY DIRECTION PLY: H / H / L
72	TAPE IN	I	Pack detection input. H: With pack – Pack-in from loading
73	AVss	–	A/D converter reference GND.
74	APC DET	I	Tape music detection input. L: Music level, H: No-music level
75	MTL IN	I	Tape metal detection. L: Normal, H: Metal
76	REEL PULSE	I	Reel rotation detection at tape run. Rotating at L/H change.
77	TEL IN	I	Telephone usage condition. H: Telephone busy
78	NC	–	Unused.
79	REMOCON	I	Remote control input. Divided into 10 kinds by A/D conversion.
80	NC	–	Unused.

Key Matrix

Key Matrix Table

INPUT \ OUTPUT	KS-0 (32Pin)	KS-1 (31Pin)	KS-2 (30Pin)	KS-3 (29Pin)	KS-4 (20Pin)
KI-0 (28Pin)	T-MODE ENABLE/ DISABLE	LOUD KEY ENABLE/ DISABLE	Woofer ENABLE/ DISABLE	VOL MODE ENCODER/ SEESAW	ACC OFF 1H ACTION ENABLE/ DISABLE
KI-1 (27Pin)	CATS-INI		MUTE	LOUD	
KI-2 (26Pin)	SEEK UP FF-APC TRK UP	SEEK DOWN REW-APC TRK DOWN	VOL-UP	VOL-DOWN	
KI-3 (25Pin)	TUNE UP FF/FF-APC FF/TRK UP	TUNE MODE	M3 RANDAM	M6 METAL (TOM)	
KI-4 (24Pin)	TUNE DOWN REW/REW-APC FB/TRK DOWN	PSS	M2 SCAN SCAN	M5 BLANK SKIP APC (TOM)	
KI-5 (23Pin)	BAND PROG DISC UP	MODE	M1 REPEAT REPEAT	M4 DOLBY	
KI-6 (22Pin)	TAPE EJECT		RDS	TA	
KI-7 (21Pin)	POWER	AUDIO UP	AUDIO DOWN	AUDIO MODE (LOUD)	

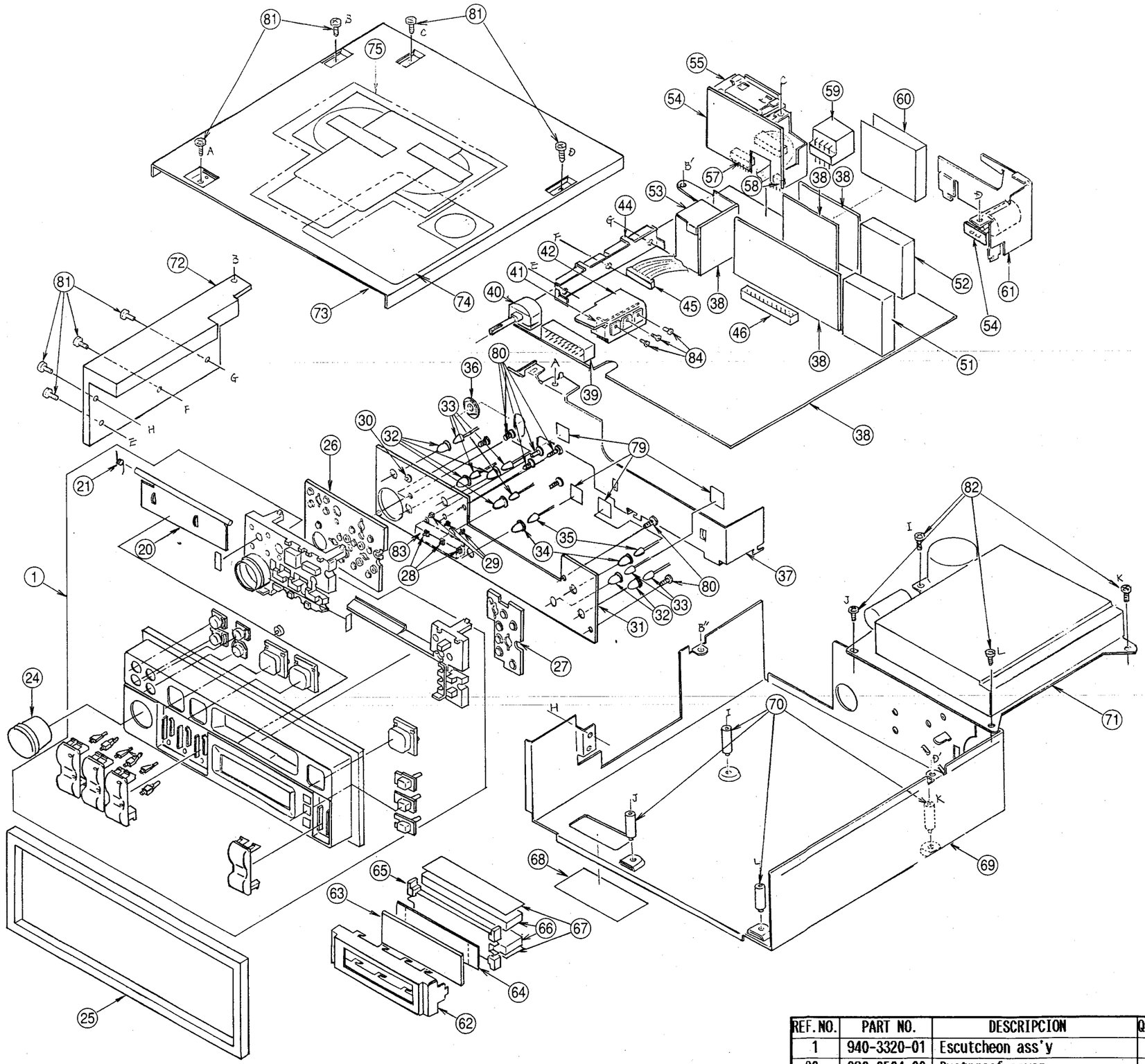
Momentary Switch　　Diode Switch

Diode Switches

※In the below table, "0" means that the diode switch is turned off(open), and "1" that it is turned on(short).

Switch Name	Function
T MODE ENABLE/DISABLE	Switch to enable/disable the T MODE. 1 : T MODE DISABLE 0 : T MODE ENABLE
LOUD KEY ENABLE/DISABLE	Switch to enable/disable the LOUD key. 1 : LOUD KEY ENABLE 0 : LOUD KEY DISABLE
WOOFER ENABLE/DISABLE	Switch to enable/disable the woofer. 1 : Woofer ENABLE 0 : Woofer DISABLE
VOL MODE	Switch to select whether the Volume mode is for the encoder or seesaw. 1 : Encoder 0 : Seesaw
ACC OFF	Switch to enable/disable ACC OFF 1H action. 1 : ENABLE 0 : DISABLE

■ EXPLODED VIEW • PARTS LIST:



REF.NO.	PART NO.	DESCRIPCION	Q'TY
1	940-3320-01	Escutcheon ass'y	1
20	320-0504-00	Dustproof cover	1

REF.NO.	PART NO.	DESCRIPCION	Q'TY
21	750-2309-01	Spring	1
24	380-5301-01	Knob (MAIN)	1
25	371-3779-00	Trim plate	1
26	345-7371-00	Rubber switch (MAIN)	1
27	345-7372-00	Rubber switch (EJECT)	1
28	001-0649-10	LED (4,5,6)	3
29	001-0486-10	LED (1,2,3)	3
30	001-0207-00	LED (CODE)	1
31	039-0003-01	Switch PWB	1
32	345-7071-09	Lamp cap	6
33	017-0410-00	Pilot lamp	6
34	345-7071-10	Lamp cap	2
35	017-0376-02	Pilot lamp	2
36	722-0368-00	Nut	1
37	331-0158-10	Front plate	1
38	099-9981-01	Main PWB	1
39	076-0414-28	Plug (28P)	1
40	012-5202-00	Main volume	1
41	330-9409-01	Heat sink holder	1
42	313-1548-01	Heat sink (TRANSISTOR)	1
44	331-0159-00	IC holder	1
45	854-1224-00	Extension lead	1
46	076-0433-20	Plug (20P MECH)	1
51	880-1602A	MW/LW Tuner pack	1
52	880-1418A	UKW Tuner pack	1
53	331-0160-00	Choke holder	1
54	039-0002-00	Socket PWB	1
55	074-0944-10	Outlet socket	1
57	076-0460-00	Plug (6P)	1
58	076-0288-02	Plug (3P)	1
59	074-0818-00	Outlet socket (13P DIN)	1
60	347-3827-00	Insulator	1
61	331-0161-11	Antenna holder	1
62	331-0157-00	LCD holder	1
63	379-0423-10	Indicator	1
64	335-4527-00	Reflector	1
65	335-4524-00	LCD Illumi	1
66	345-7366-00	Rubber connector	2
67	347-3818-00	Spacer	2
68	290-4411-00	Label	1
69	331-1591-10	Lower case	1
70	716-1461-00	Spacer	4
71	930-0735-00	Tape mechanism (GFX)	1
72	313-1545-11	Heat sink	1
73	313-1527-10	Upper case	1
74	286-8052-00	Set plate	1
75	948-0240-13	Label ass'y	1
79	335-0359-00	Shade	4
80	716-0872-00	Pad screw	8
81	714-2610-81	Machine screw	8
82	716-0878-00	IT Screw	4
83	074-0961-28	Outlet scket (28P)	1
84	714-2608-81	Machine screw	3

■ PARTS LIST:

◎Electrical section

•SWITCH P.W.B

REF.NO.	PART NO.	DESCRIPTION	Q'TY
D104	001-0207-00	LED TLR124	1
D101, 102, 103	001-0486-10	LED GL1EG211	3
D105, 106, 107	001-0649-10	LED GL1EG212	3
IC102, 103	051-08836-10	IC TC7582E	2
	051-08836-20	IC TC7582EMT	

REF.NO.	PART NO.	DESCRIPTION	Q'TY
IC101	051-1345-15	IC HB88307APFG	1
C103, 106	176-6811-00	CERAMIC CHIP-C 680pF CH	2
C102	178-1032-05	CERAMIC CHIP-C 0.01μF	1
C104, 107	178-1042-05	CERAMIC CHIP-C 0.1μF	2

•MAIN P.W.B

REF.NO.	PART NO.	DESCRIPTION	Q'TY
D133	001-0188-01	DIODE 1SS1885A	1
D115, 123	001-0330-00	DIODE 1SS119	2
	001-0352-00	DIODE 1SS176	
D128, 103, 146	001-0356-00	DIODE 1SS184	3
	001-0354-00	DIODE MA151WK	
	001-0506-00	DIODE DAN202K	
D129, 145	001-0356-05	DIODE 1SS181	2
	001-0354-05	DIODE MA151WA	
	001-0507-00	DIODE DAP202K	
D121, 151, 601 602	001-0367-00	DIODE 1SS226	6
	001-0541-00	DIODE MA157A	
D106	001-0377-34	DIODE MA4062L	1
	001-0376-34	DIODE MTZ6.2JA	
	001-0400-34	DIODE HZS6.2JB1	
D121	001-0377-44	DIODE MA4082M	1
	001-0376-44	DIODE MTZ8.2JB	
	001-0400-44	DIODE HZS8.2JB2	
D120, 122	001-0377-47	DIODE MA4091M	2
	001-0376-48	DIODE MTZ9.1JC	
	001-0400-47	DIODE HZS9.1JB2	
D104	001-0377-48	DIODE MA4091H	1
	001-0376-49	DIODE MTZ10JA	
	001-0400-48	DIODE HZS9.1JB3	
D108	001-0377-50	DIODE MA4100M	1
	001-0376-51	DIODE MTZ10JC	
	001-0400-50	DIODE HZS10JB2	
D116	001-0377-63	DIODE MA4150M	1
	001-0376-64	DIODE MTZ15JC	
	001-0400-63	DIODE HZS15JB3	
D126	001-0425-31	DIODE HZS18JB	1
D107, 112, 114	001-0466-00	DIODE S5688B	3
	001-0499-00	DIODE ERA15-01	
D117, 118	001-0502-00	DIODE HZS1&J	2
D111, 124, 130 137, 138	001-0516-00	DIODE MA111	5
D102, 104	001-0579-00	DIODE 1SV128	2
P0601	002-0220-00	THERMISTOR	1
IFT602	005-1022-51	IF-TRANS	1
IFT601	005-1035-00	IF-TRANS	1
L113	009-0470-03	CHOKE	1
L106	009-0652-00	CHOKE	1
L101	010-2003-04	COIL 36μH	1
L620	010-2174-36	COIL 1MH	1
L621	010-2199-16	COIL 2.2μH	1

REF.NO.	PART NO.	DESCRIPTION	Q'TY
L105, 106, 112	010-2230-14	COIL 2.2μH	3
L102, 103	010-2230-16	COIL 3.3μH	2
L107, 111	010-2230-28	COIL 33μH	2
L104	010-2230-33	COIL 82μH	2
VR512	012-4318-00	VARIABLE-R 330	1
VR501	012-4318-04	VARIABLE-R 3.3	1
VR401, 402	012-4318-06	VARIABLE-R 10k	2
VR101	012-4738-11	VARIABLE-R 220k	1
VR102	012-4738-12	VARIABLE-R 330k	1
VR602	012-4863-00	VARIABLE-R 330	1
VR601	012-4863-06	VARIABLE-R 10k	1
VR603, 604	012-4863-07	VARIABLE-R 22k	2
C197	042-0171-00	ELECTRO-C 16V 47μF TAN	1
C120	042-0174-50	ELECTRO-C 16V 4.7μF TAN	1
C206, 209, 222 223	042-0334-24	ELECTRO-C 16V 22μF	4
C197	042-0378-00	ELECTRO-C 10V 220μF	1
C102, 112, 122 200, 635, 639	042-0397-00	ELECTRO-C 16V 1μF	6
C106	042-0397-03	ELECTRO-C 25V 0.47μF TAN	1
C640	042-0397-06	ELECTRO-C 35V 0.1μF TAN	1
C123-126	042-0398-03	ELECTRO-C 16V 3.3μF TAN	4
C607	042-0403-01	ELECTRO-C 16V 10μF TAN	1
C211, 225	042-0439-00	ELECTRO-C 10V 220μF	2
C184, 227	042-0447-00	ELECTRO-C 16V 2200μF	2
C260	042-0450-00	ELECTRO-C 6.3V 470μF	1
C119, 461	042-0452-01	ELECTRO-C 10V 220μF	2
IC119	051-0160-56	IC HD74LS07FPD	1
IC104	051-0350-55	IC NJM4558M	1
IC502	051-0556-01	IC NJM2058M	1
IC401, 802	051-0853-01	IC M5201FP	2
IC131	051-0869-05	IC MB3771PF	1
IC106	051-1014-10	IC TA7291S	1
IC405	051-1038-01	IC CXA1102M	1
IC115	051-1046-46	IC LC3517BML	1
IC113, 114	051-1111-01	IC TA8210AH	2
IC109	051-1188-01	IC TA78DL06AP	1
IC602	051-1250-00	IC TC4S66F	1
IC101	051-1282-00	IC TA7372P	1
IC117	051-1375-35	IC	1
	051-1375-65	IC	
IC601	051-1525-00	IC TA8172AF	1
IC110	051-1556-05	IC S80740AN	1
IC503	051-1817-00	IC TDA1581T	1

REF.NO.	PART NO.	DESCRIPTION	Q'TY
IC803	051-1818-00	IC M51139FP	1
IC501	051-1819-00	IC SAA6579T	1
IC116	052-1103-00	IC μPD17006AGf-616-3B9	1
IC118	052-3109-00	IC μPD75518GF-141-3B9	1
SUP101, 102	060-0122-10	SURGE PROTECTOR	2
X102	060-0130-50	CERA-RESONATOR 4.19MHz	1
FIL101	060-0235-00	BAND PASS FILT	1
X601	060-0240-00	CERA-RESONATOR	1
X101	061-1053-00	CRYSTAL 4.5MHz	1
X501	061-3013-00	CRYSTAL 4.332MHz	1
Q113, 136, 148	100-1162-00	TRANSISTOR 2SA1162	3
	100-1037-00	TRANSISTOR 2SA1037	
	100-1179-00	TRANSISTOR 2SA1179	
Q137	100-1298-00	TRANSISTOR 2SA1298	1
Q128, 134, 135	100-1313-00	TRANSISTOR 2SA1313	3
Q117, 124	100-1431-00	TRANSISTOR 2SA1431	2
Q114	101-1243-00	TRANSISTOR 2SB1243	1
Q603	102-2715-00	TRANSISTOR 2SC2715	1
Q101-103, 105 108, 109, 115 118, 154, 605	102-2712-51	TRANSISTOR 2SC2712GL	10
	102-2412-50	TRANSISTOR 2SC2412K	
	102-2812-51	TRANSISTOR 2SC2812	
Q106, 107	102-3624-00	TRANSISTOR 2SC3624L	2
Q143-146	103-1306-00	TRANSISTOR 2SD1306	4
Q116	103-1858-00	TRANSISTOR 2SD1858	1
Q125, 129	103-2012-00	TRANSISTOR 2SD2012	2
Q604	108-0372-00	TRANSISTOR 2SK372	1
Q130, 141	125-0002-03	TRANSISTOR RN2403	2
	125-0001-02	TRANSISTOR UN2112	
	125-0014-03	TRANSISTOR DTA124EK	
Q127, 132	125-0013-07	TRANSISTOR RN2427	2
Q140, 155	125-2004-02	TRANSISTOR RN1402	2
	125-2005-01	TRANSISTOR UN2211	
	125-2020-02	TRANSISTOR DTC114EK	
Q104, 110, 111 126, 131, 138 139, 150, 401 501, 502, 601 602	125-2004-03	TRANSISTOR RN1403	13
	125-2005-02	TRANSISTOR UN2212	
	125-2020-03	TRANSISTOR DTC124EK	
C116, 183, 185 189, 212	172-1041-10	POLYESTOR-C 0.1μF	5
C214-217 228-231	172-1241-10	POLYESTOR-C 0.12μF	8
C121	172-2231-10	POLYESTOR-C 0.022μF	1
C117	172-4731-10	POLYESTOR-C 0.047μF	1
C521, 522	172-6831-10	POLYESTOR-C 0.068μF	2
C408, 410, 518	176-1011-00	CERAMIC-CHIP-C 100PF CH	3
C237, 238, 615	176-2201-00	CERAMIC-CHIP-C 22PF CH	3
C109, 434, 453	176-2211-00	CERAMIC-CHIP-C 220PF CH	3
C104, 105, 616	176-2701-00	CERAMIC-CHIP-C 27PF CH	3
C501, 516, 612	176-3311-00	CERAMIC-CHIP-C 330PF CH	3
C506	176-4701-00	CERAMIC-CHIP-C 47PF CH	1
C440, 448	176-4711-00	CERAMIC-CHIP-C 470PF CH	2
C520	176-5601-00	CERAMIC-CHIP-C 56PF CH	1

REF.NO.	PART NO.	DESCRIPTION	Q'TY
C503	176-5611-00	CERAMIC-CHIP-C 560PF CH	1
C111, 407, 409	176-6801-00	CERAMIC-CHIP-C 68PF CH	3
C638	176-6811-00	CERAMIC-CHIP-C 680PF CH	1
C505	176-8201-00	CERAMIC-CHIP-C 82PF CH	1
C523, 529	177-1542-05	CERAMIC-CHIP-C 0.15μF	2
C127, 132, 523	177-2242-05	CERAMIC-CHIP-C 0.22μF	3
C207, 210, 221 224, 234, 235 239-248, 612 622, 625, 626 630, 901	178-1022-05	CERAMIC-CHIP-C 1000PF	22
C107, 110, 114 127-130, 192 194, 203, 301 620, 623	178-1032-05	CERAMIC-CHIP-C 0.01μF	13
C101, 151, 188 201, 202, 233 236, 249, 252 256, 413, 452 460, 503, 507 510, 525, 528 614, 637, 663	178-1042-05	CERAMIC-CHIP-C 0.1μF	22
C441, 447	178-1232-05	CERAMIC-CHIP-C 0.012μF	2
C530	178-1832-05	CERAMIC-CHIP-C 0.018μF	1
C606	178-2222-05	CERAMIC-CHIP-C 2200PF	1
C132, 605, 617	178-2232-05	CERAMIC-CHIP-C 0.022μF	3
C513	178-2732-05	CERAMIC-CHIP-C 0.027μF	1
C141, 142	178-3922-05	CERAMIC-CHIP-C 3900PF	2
C636	178-3932-05	CERAMIC-CHIP-C 0.039μF	1
C113	178-4722-05	CERAMIC-CHIP-C 4700PF	1
C517, 526, 604 608, 609, 627 628	178-4732-05	CERAMIC-CHIP-C 0.047μF	7
C514	178-5632-05	CERAMIC-CHIP-C 0.056μF	1
C138, 139	178-6822-05	CERAMIC-CHIP-C 6800PF	2
C527, 613	178-6832-05	CERAMIC-CHIP-C 0.068μF	2
C436, 452	178-8232-05	CERAMIC-CHIP-C 0.082μF	2
C403	182-1063-32	ELECTRO-C 16V 10μF	1
C602	182-4763-23	ELECTRO-C 10V 47μF	1
C149	182-4763-33	ELECTRO-C 16V 47μF	1
C419	183-1017-11	ELECTRO-C 6.3V 100μF	1
C412, 412, 509 515, 611, 632 634	183-1053-61	ELECTRO-C 50V 1μF	7
C190	183-1053-62	ELECTRO-C 50V 1μF	1
C406, 413, 459 508, 511, 512 610, 618, 629 637, 638, 642	183-1063-31	ELECTRO-C 16V 10μF	12
C134, 135, 150 154, 191, 199 232	183-1063-51	ELECTRO-C 35V 10μF	7
C152, 196	183-1073-27	ELECTRO-C 10V 100μF	2

REF.NO.	PART NO.	DESCRIPTION	Q'TY
C502,619	183-2253-61	ELECTRO-C 50V 2.2μF	2
C205,206,219 224,432,433 435,437,446 451,454,455	183-2256-51	ELECTRO-C 35V 2.2μF NP	12
C187	183-2263-31	ELECTRO-C 16V 22μF	1
C132,401,404 418	183-3363-21	ELECTRO-C 10V 33μF	4
C411,519	183-4753-51	ELECTRO-C 35V 4.7μF	2

REF.NO.	PART NO.	DESCRIPTION	Q'TY
C416	183-4753-52	ELECTRO-C 35V 4.7μF	1
C458,531,532 633	183-4763-11	ELECTRO-C 6.3V 47μF	4
C106,115,131 613	183-4763-31	ELECTRO-C 16V 47μF	4
C103,274,420 430	183-6843-61	ELECTRO-C 50V 0.68μF	4
C133	183-6863-21	ELECTRO-C 10V 68μF	1
C186	184-3373-31	ELECTRO-C 16V 330μF	1

·TAPE MECHANISM PWB

REF.NO.	PART NO.	DESCRIPTION	Q'TY
C6,7	042-0476-01	ELECTRO-C 10V 33μF	2
IC1	051-1546-10	IC BA3430S	1
C8,9	173-1231-10	POLYESTOR-C 0.012μF	2
C1-4,12	175-5611-50	ELECTRO-CHIP-C 560PF	5
C11	183-1043-61	ELECTRO-C 50V 0.1μF	1

REF.NO.	PART NO.	DESCRIPTION	Q'TY
C14	183-2263-31	ELECTRO-C 16V 22μF	1
C13	183-4743-1	ELECTRO-C 50V 0.47μF	1
C10,15,16	183-4753-51	ELECTRO-C 35V 4.7μF	3
C5	183-4763-11	ELECTRO-C 6.3V 47μF	1

• How to read resistor

Resistors are deleted from the table of electric components, (except special resistors).
They can be converted to product Nos. as follows.

Film resistor (Carbon film resistor/Metal film resistor)

□□□-□□□□-□□

Classification	Resistance*	Tolerance of the value of resistance		Rated power			Shape	
111 (Carbon film resistor)		0	±2%	0			0	
	Example	1	±5%	1	1/8W	Approx. 3.7mm	1	Horizontal
	33Ω=330	2		2	1/4Ws	Approx. 6.5mm	2	Vertical
	33kΩ=333	3		3			3	
		4		4	1/2W	Approx. 9mm	4	
				7	1/8W	Approx. 3.5mm		
				8	1/2Ws	Approx. 6.6mm		
				9	1/4Wss	Approx. 3.2mm		
114 (Metal film resistor)		0		1	1W	Approx. 9.0mm	0	
		1	±5%	2	2W	Approx. 11.0mm	1	Horizontal
		2		3	3W	Approx. 15.0mm	2	

(Example)

Carbon film resistor | 1kΩ | ±5% | 1/4Wss | Vertical

1 1 1 - 1 0 2 1 - 9 2

Note 1. The first two of three digits representing resistance are effective digits and the last one represents number of "0" following this.
Unit is given in ohm (Ω).

Chip resistor

□□□-□□□□-□0

Classification	Resistance*	Tolerance of the value of resistance		Rated power			
116	Example	0	for 0Ω resistor	0	for 0Ω resistor		
	33Ω=330	1	±5%	1	1/8W	1.6mm 3.2mm	
	33kΩ=333	2	±10%	2			
117		0	for 0Ω resistor	0	for 0Ω resistor		
		1	±5%	1	1/8W	1.25mm 2.0mm	
		2	±10%	2			
118		0		0			
		1	±5%	1	1/8W	3.2mm 4.5mm	
		2	±10%	2			
119		0	for 0Ω resistor	0	for 0Ω resistor		
		1	±5%	1	1/8W	0.8mm 1.6mm	
		2	±10%	2			

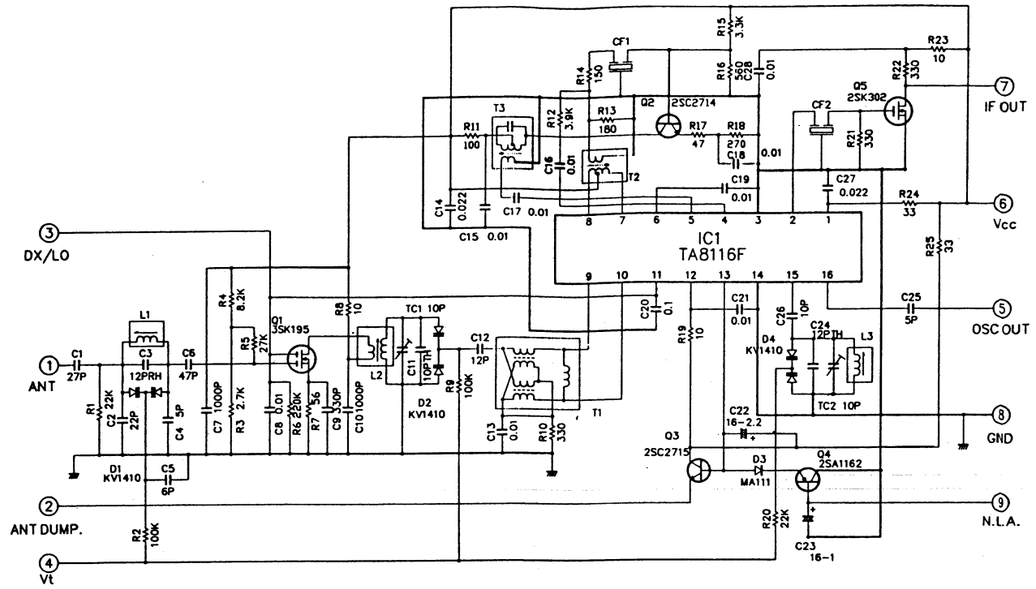
(Example)

Chip resistor (3.2mm×1.6mm) | 1kΩ | ±5% | 1/8W

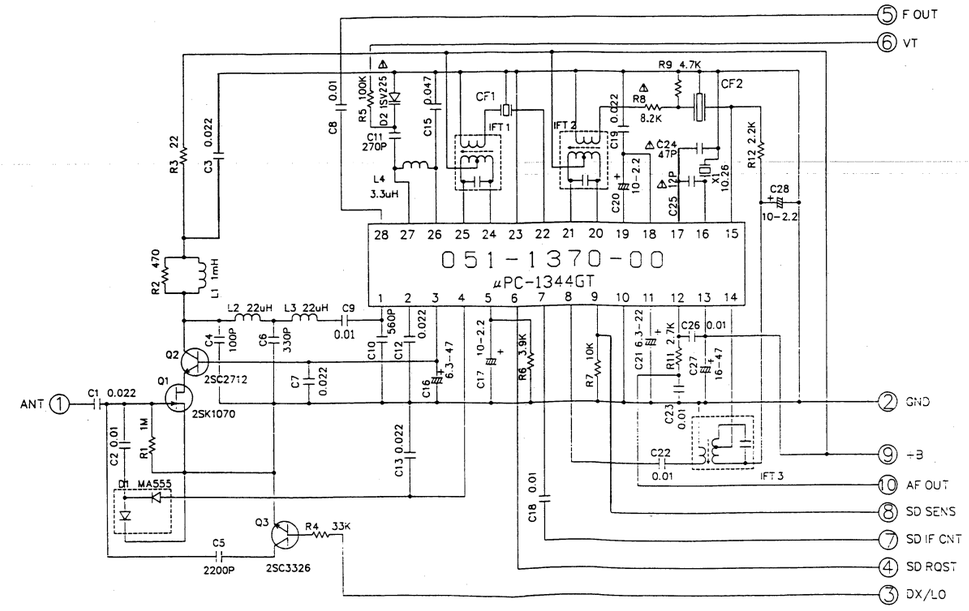
1 1 6 - 1 0 2 1 - 1 0

■ BLOCK CIRCUIT DIAGRAM

• FM Tuner Pack 880-1418A



• MW/LW Tuner Pack 880-1602A



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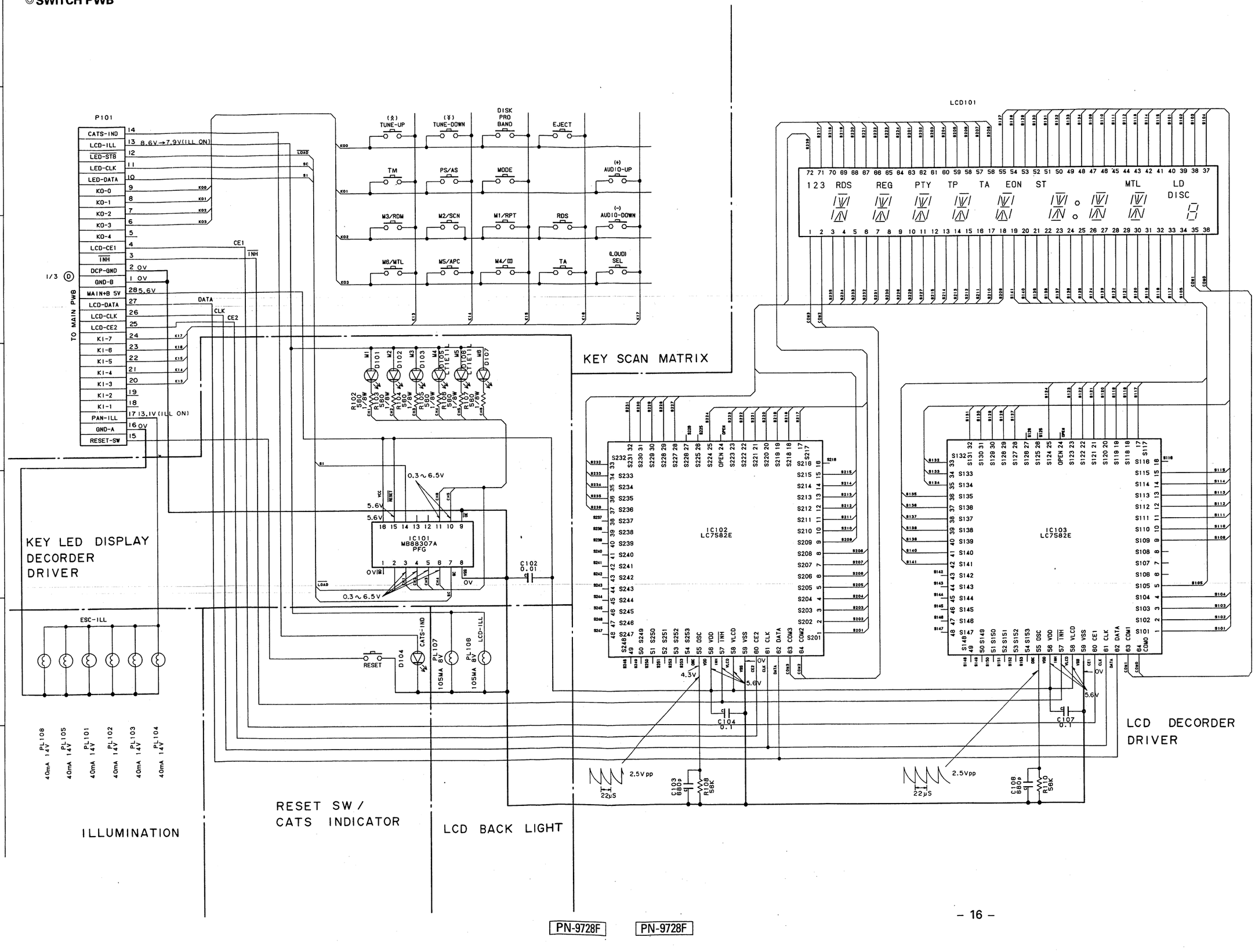
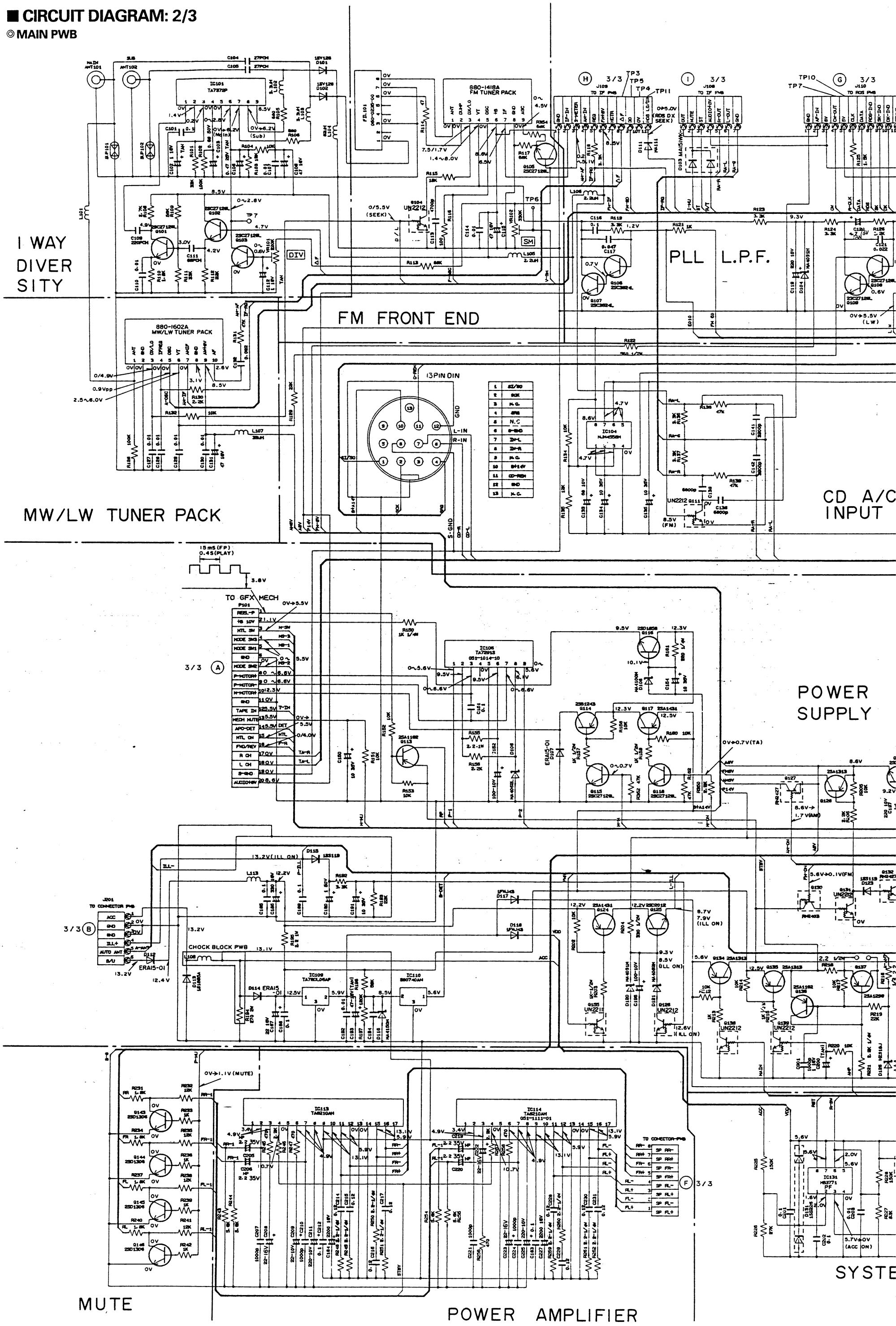
■ CIRCUIT DIAGRAM: 1/3

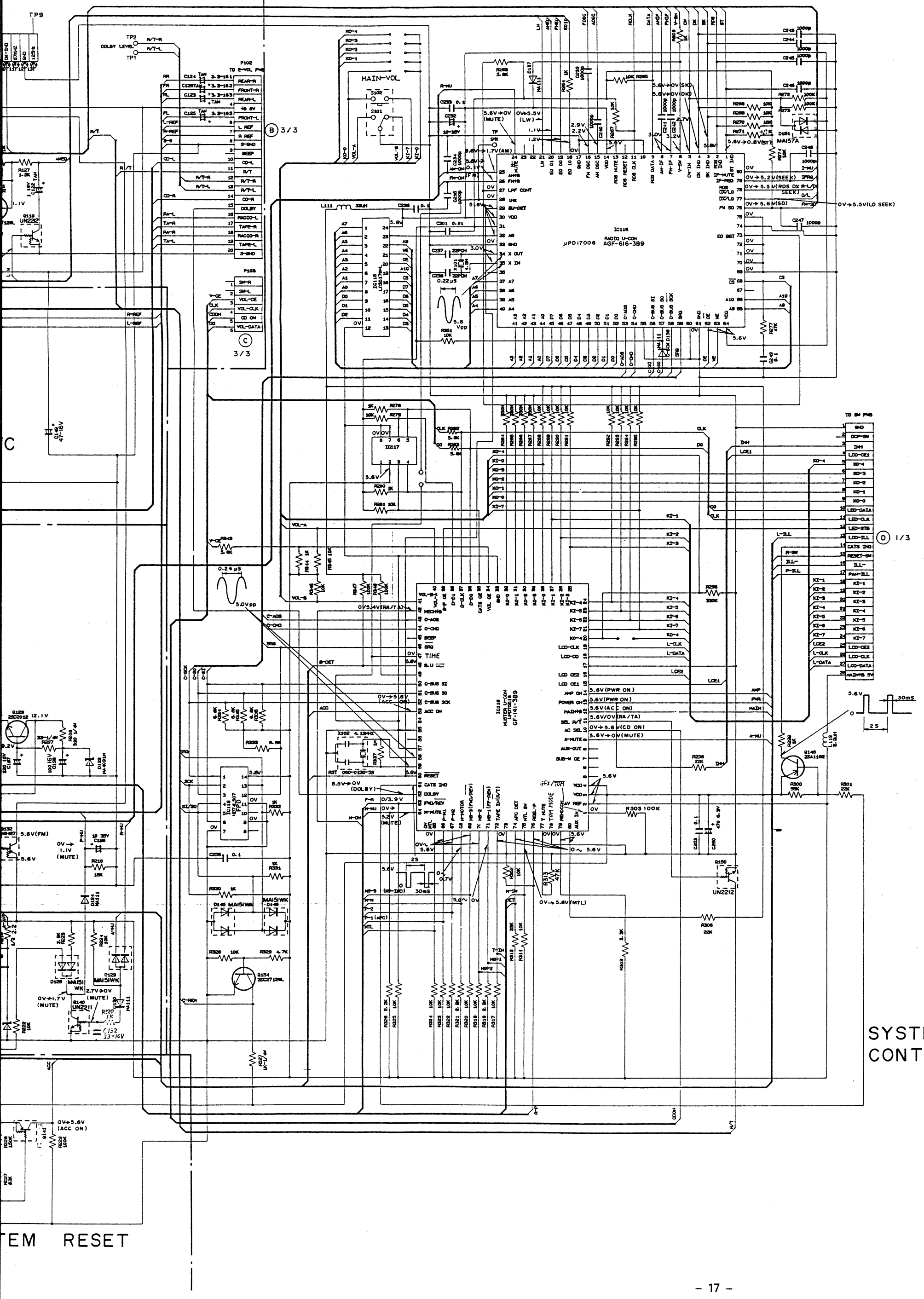
◎ SWITCH PWB



■ CIRCUIT DIAGRAM: 2/3

◎ MAIN PWB

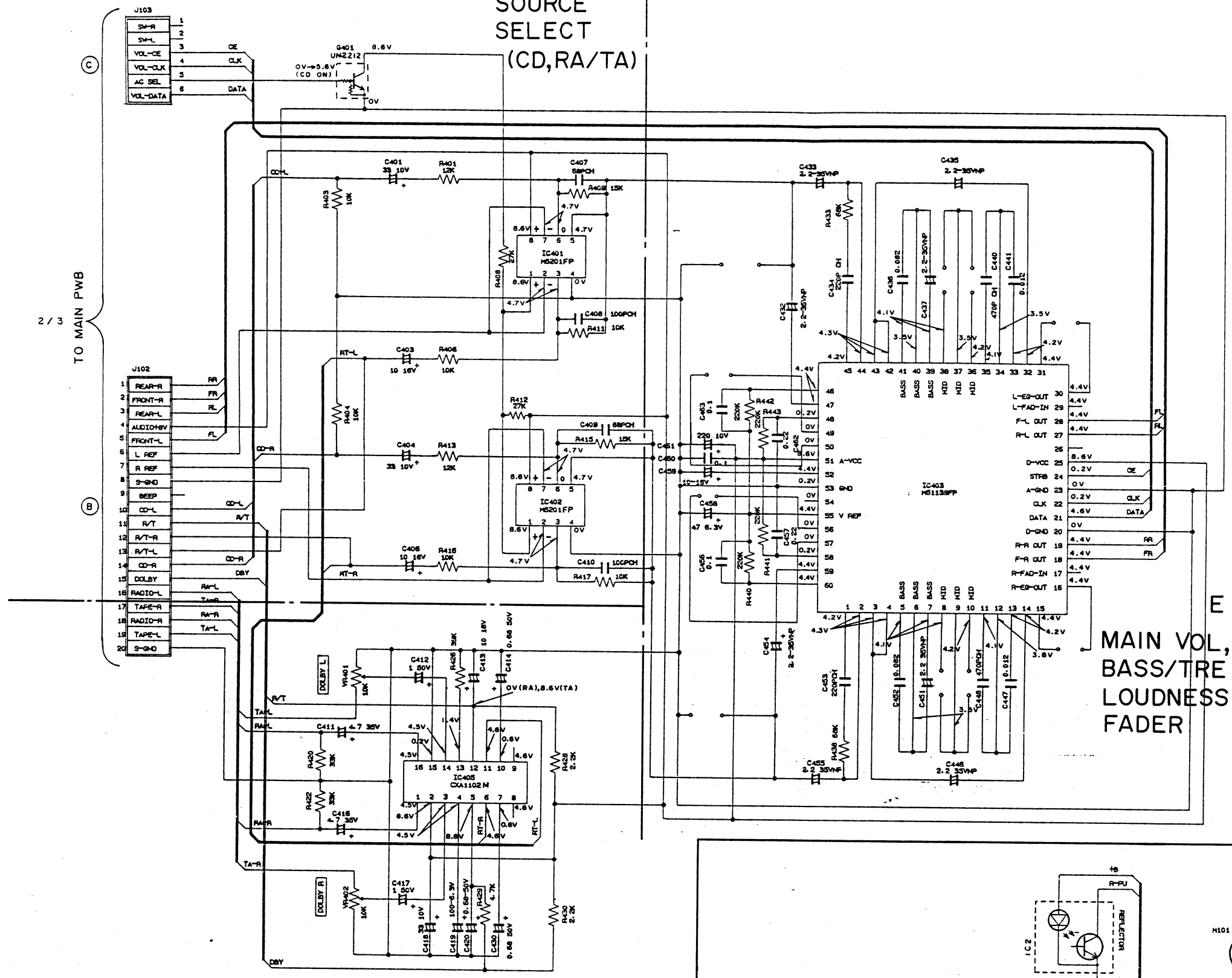



TP9
TP2
DOLBY LEVEL
TP1
R/T-R
R/T-L
P102
TO E-VOL PWB
REAR-R
FRONT-R
REAR-L
+8.8V
FRONT-L
L REF
R REF
S-GND
BEEP
CD-L
R/T
R/T-R
R/T-L
CD-R
DOLBY
RADIO-L
TAPE-R
RADIO-R
TAPE-L
S-GND
P103
SW-R
SW-L
VOL-CE
VOL-CLK
GD ON
VOL-DATA
MAIN-VOL
S102
S101
KO-4
KO-3
KO-2
KO-1
KO-0
KI-7
KI-6
KI-5
KI-4
KI-3
KI-2
KI-1
KI-0
VOL-A
VOL-B
VOL-S
IC116
RADIO U-COM
AGF-616-389
μPD17006
IC118
MASTER U-COM
GF-141-389
IC117
IC119
IC115
TIME
TOM MODE
Q110 UN2212
Q129 2SC2012
Q140 UN2211
Q154 2SC2712BL
Q141
Q150 UN2212
Q146 2SA1162
D137 MA111
D122 MA4033H
D124 MA111
D125 MA111
D145 MA151WA
D148 MA151WK
D128 MA151WK
D129 MA151WK
D130 MA111
D181 MA157A
X101 4.5M
X102 4.19MHz
RST 060-0130-29
L111 33UH
L112 8.2UH
0.24 μs
5.0Vpp
0.22 μs
5.6 Vpp
0.7V
30mS
2S
5.6V
3.0V
2.7V
2.2V
1.1V
1.2V
1.7V(AM)
5.6V→0V (MUTE)
0V→5.5V (LW)
0V→5.2V(SEEK)
0V→5.5V(RDS DX R-L SEEK)
0V→5.6V(SD)
0V→5.5V(LO SEEK)
5.6V→0.8V(ST)
0V→5.6V (ACC ON)
0V→5.6V(MTL)
2.7V→0V (MUTE)
0V→1.7V (MUTE)
8.5V→0V (DOLBY)
0/5.4V(RA/TA)
0/3.9V
5.2V (MUTE)
5.6V(FM)
5.6V(PWR ON)
5.6V(ACC ON)
5.6V/0V(RA/TA)
0V→5.6V(CD ON)
5.6V→0V(MUTE)
TO SW PWB
TO E-VOL PWB
SYSTEM CONTROL
SYSTEM RESET
(B) 3/3
(C) 3/3
(D) 1/3

■ CIRCUIT DIAGRAM: 3/3

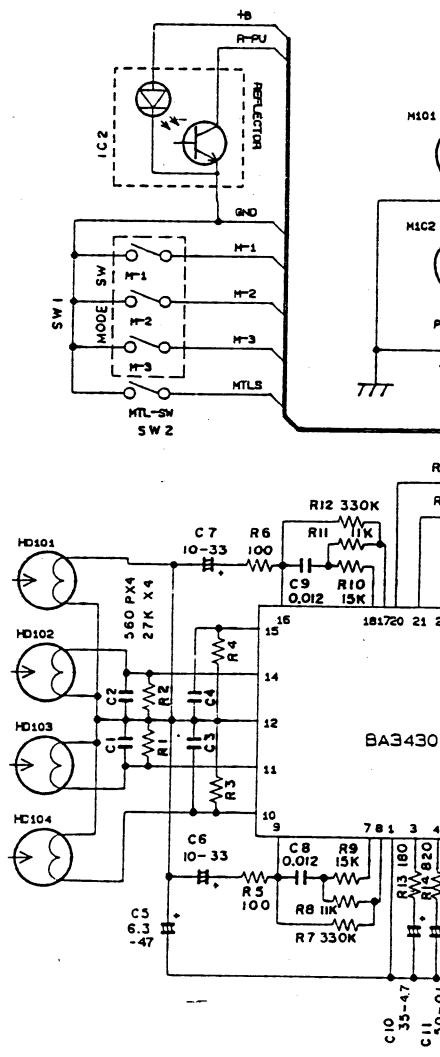
E-VOL BLOCK PW

SOURCE SELECT (CD,RA/TA)



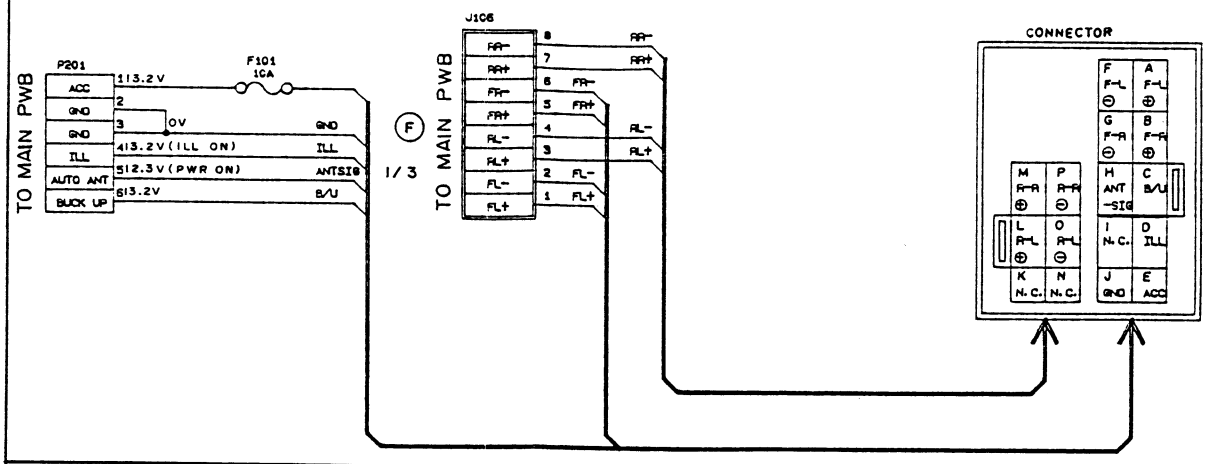
MAIN VOL, BASS/TRE LOUDNESS, FADER

SOURCE SELECT DOLBY B, (RADIO/TAPE)

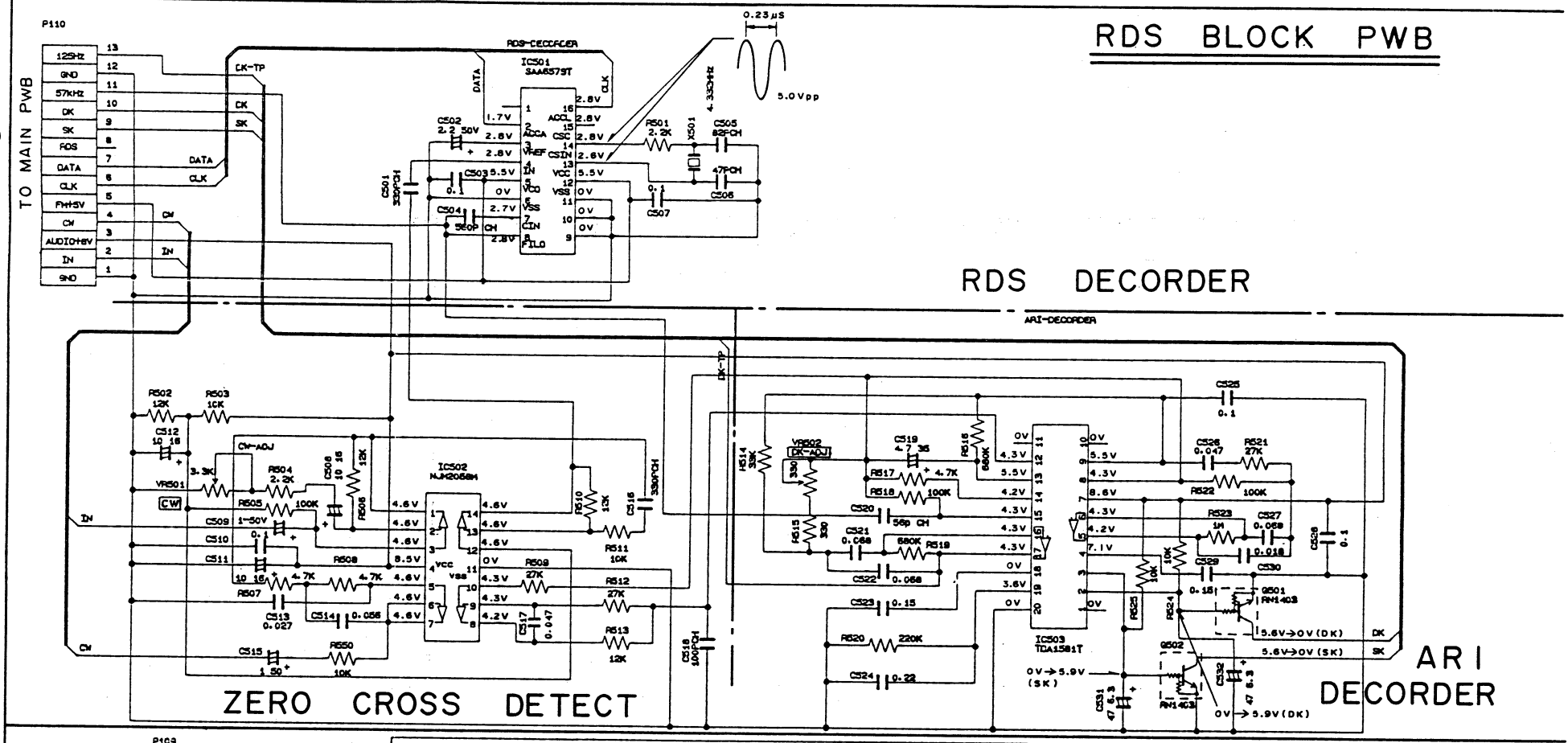


TAPE

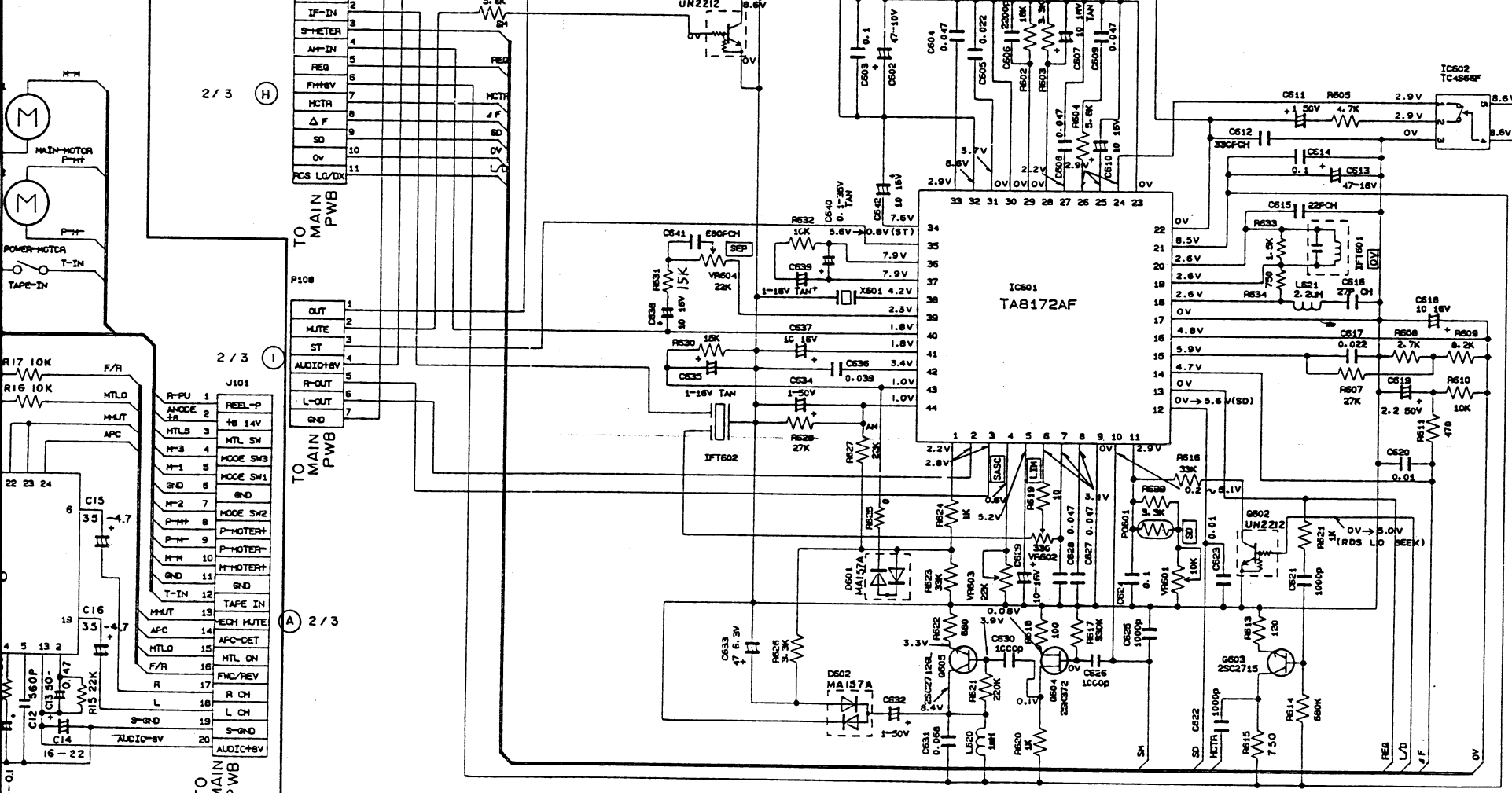
CONNECTOR PWB



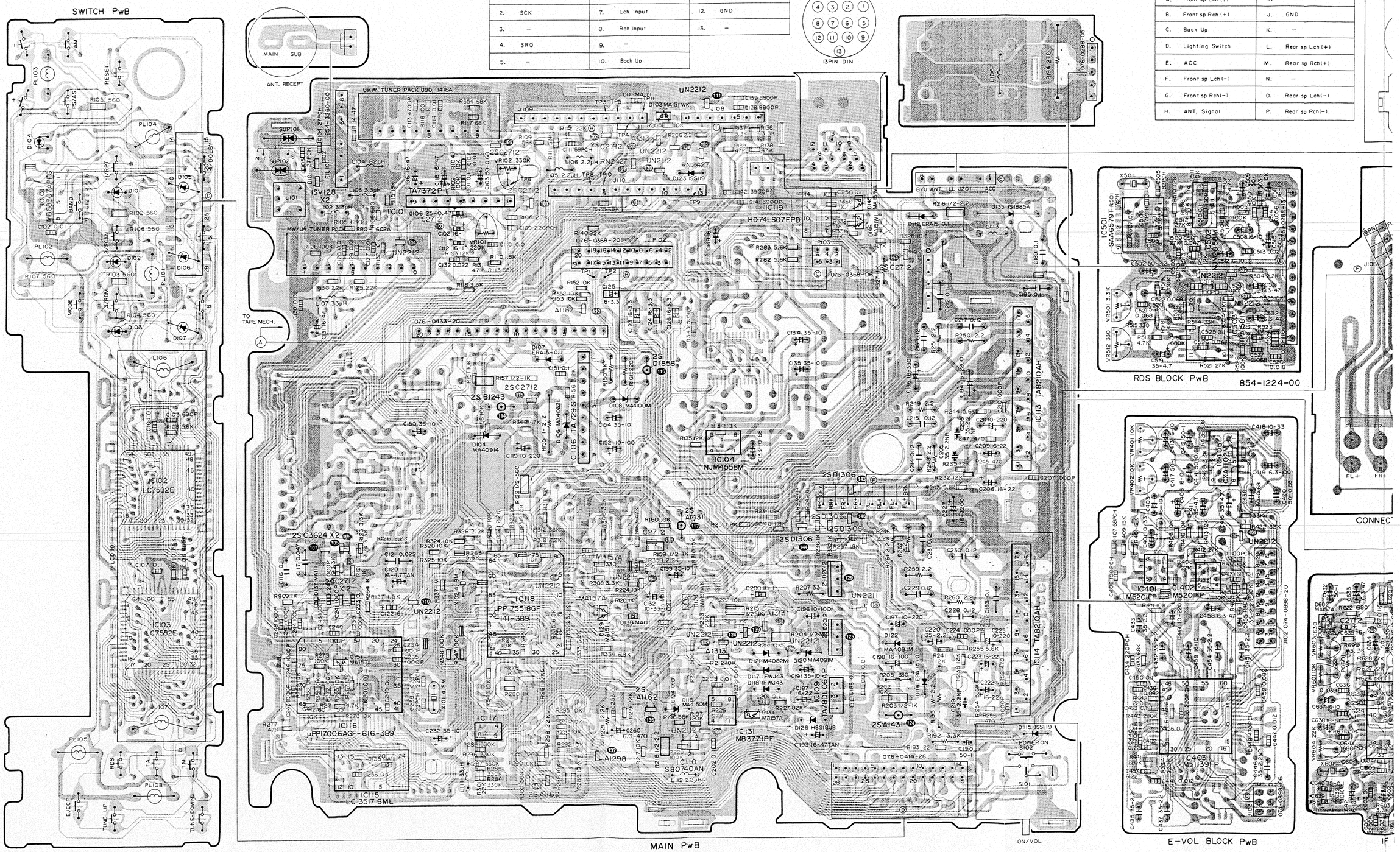
RDS BLOCK PWB



IF BLOCK PWB



■ PRINTED WIRING BOARD:



1.	SO/SI	6.	Signal GND	11.	ACC Control
2.	SCK	7.	Lch Input	12.	GND
3.	—	8.	Rch Input	13.	—
4.	SRQ	9.	—		
5.	—	10.	Back Up		

A.	Front sp Lch (+)	1.	—
B.	Front sp Rch (+)	J.	GND
C.	Back Up	K.	—
D.	Lighting Switch	L.	Rear sp Lch (+)
E.	ACC	M.	Rear sp Rch (+)
F.	Front sp Lch (−)	N.	—
G.	Front sp Rch (−)	O.	Rear sp Lch (−)
H.	ANT. Signal	P.	Rear sp Rch (−)

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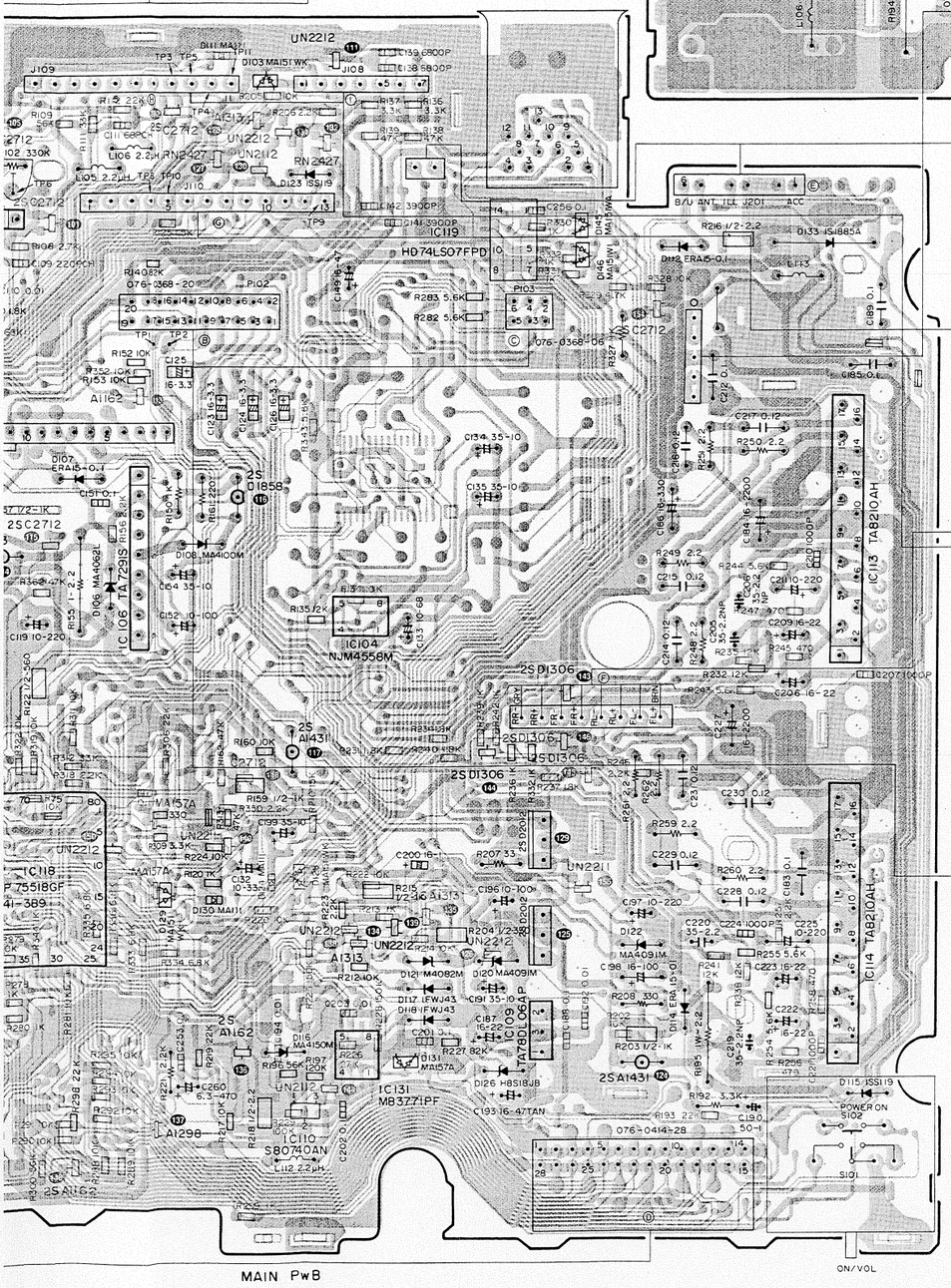
PN-9728F

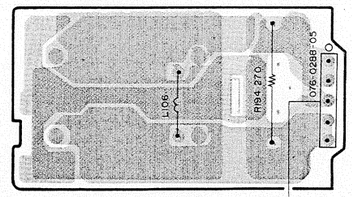
.	SO/SI	6.	Signal GND
.	SCK	7.	Lch Input
.	—	8.	Rch Input
.	SRQ	9.	—
.	—	10.	Back Up

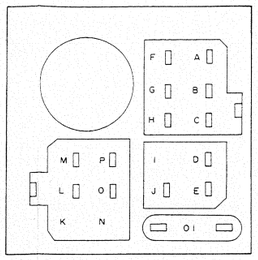
11.	ACC Control		
12.	GND		
13.	—		

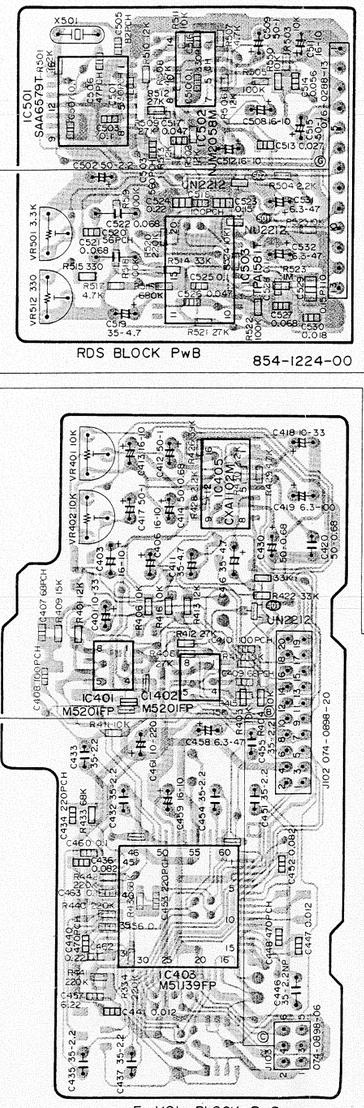
13PIN DIN

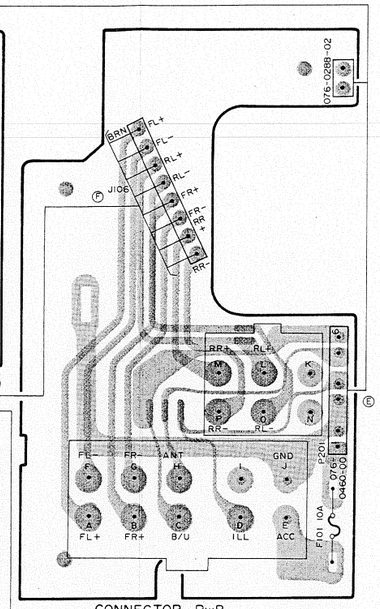
A.	Front sp Lch (+)	I.	—
B.	Front sp Rch (+)	J.	GND
C.	Back Up	K.	—
D.	Lighting Switch	L.	Rear sp Lch (+)
E.	ACC	M.	Rear sp Rch (+)
F.	Front sp Lch (−)	N.	—
G.	Front sp Rch (−)	O.	Rear sp Lch (−)
H.	ANT. Signal	P.	Rear sp Rch (−)

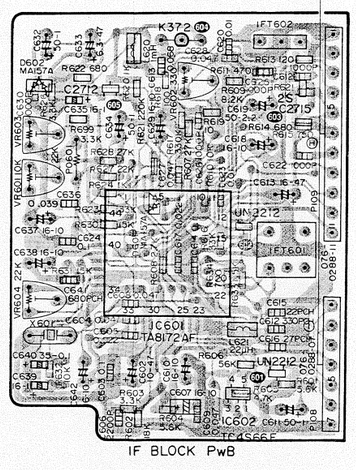




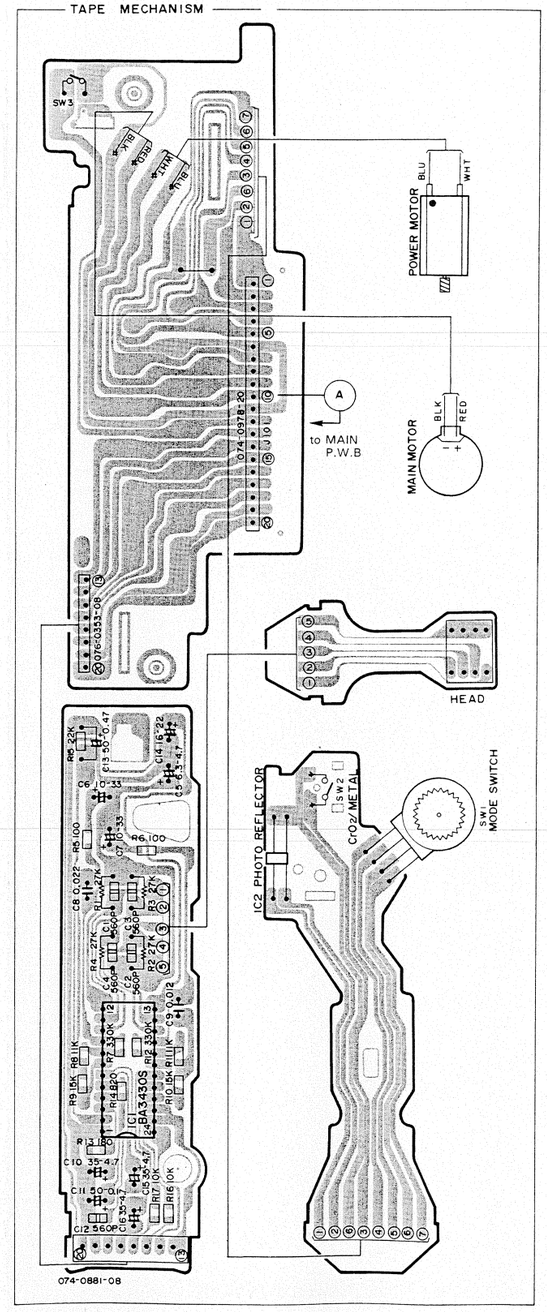






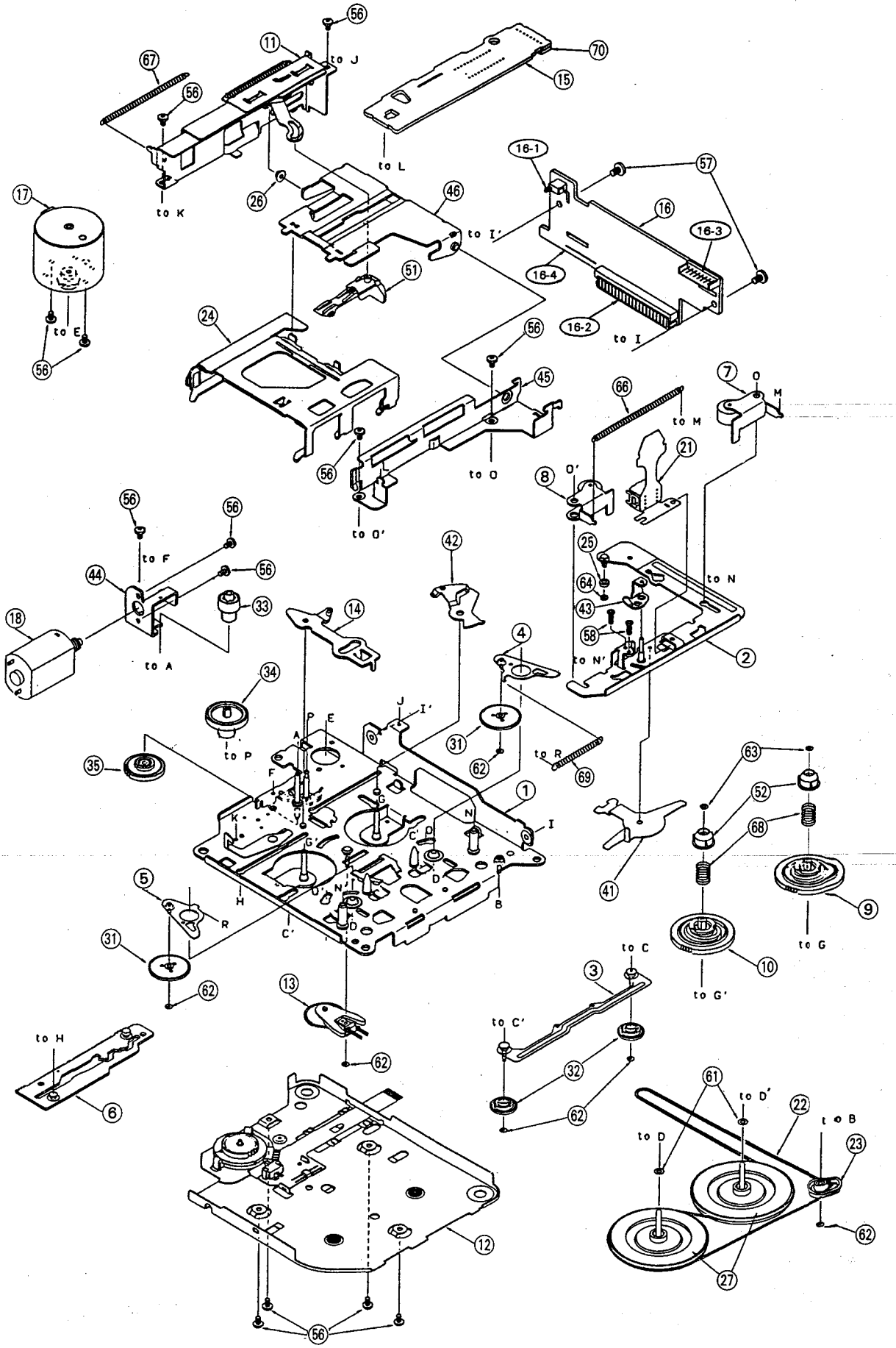


TAPE MECHANISM



■ EXPLODED VIEW • PARTS LIST:

© Tape mechanism section 930-0735-00

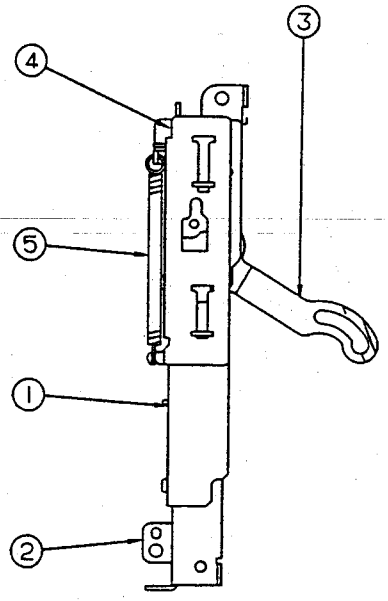


PN-9728F

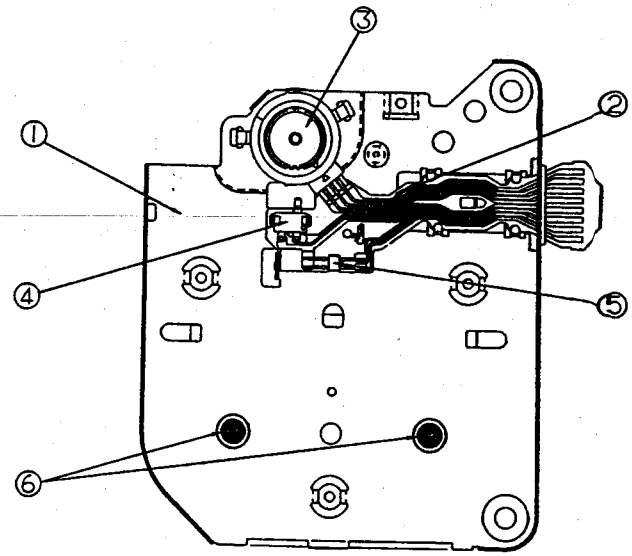
NO	PART NO.	DESCRIPTION	QTY
1	960-4294-07	DECK PLATE-ASSY	1
2	960-4261-03	HEAD PLATE ASSY	1
3	960-4262-02	FF/REW-P-ASSY	1
4	960-4263-01	IDLER-P-ASSY F	1
5	960-4264-01	IDLER-P-ASSY R	1
6	960-4266-04	MODE PLATE-ASSY	1
7	960-4269-03	ROLLER ASSY F	1
8	960-4270-03	ROLLER ASSY R	1
9	960-4271-02	REEL ASSY F	1
10	960-4272-02	REEL ASSY R	1
11	960-4298-02	EJECT SUB-ASSY	1
12	960-4296-02	BOTTOM SUB-ASSY	1
13	960-4282-03	DETECT SUB-ASSY	1
14	960-4301-01	PLAY-L-ASSY GF	1
15	099-9540-00	PRE-PWB	1
16	990-0692-00	REAR-PWB-ASSY	1
16-1	013-3906-00	SWITCH	1
16-2	074-0978-20	OUTLET SOCKET *20P	1
16-3	076-0353-08	PLUG *8P	1
16-4	099-9541-00	REAR PWB	1
17	SMA-130-100	MAIN MOTOR	1
18	SMA-131-100	POWER MOTOR	1
21	011-0307-28	HEAD	1
22	602-0118-00	BELT	1
23	604-0040-20	TENSION PULLEY	1
24	606-0101-04	PACK GUIDE	1
25	610-0342-01	HEAD-P-ROLLER	1

NO	PART NO.	DESCRIPTION	QTY
26	610-0343-00	GUIDE A ROLLER	1
27	611-0091-02	FLYWHEEL	2
31	613-0285-02	IDLER GEAR	2
32	613-0286-02	FF/REW GEAR	2
33	613-0288-01	HERICAL GEAR	1
34	613-0289-01	GEAR A	1
35	613-0290-00	POWER GEAR	1
41	630-2597-01	CHANGE LINK	1
42	630-2598-04	EJECT LINK	1
43	630-2600-01	ADJUST LINK	1
44	630-2601-02	MOTOR PLATE	1
45	630-2626-01	PWB FRAME	1
46	630-2605-01	GUIDE ARM	1
51	631-1992-01	PACK STOPPER	1
52	631-1993-01	SLIDE BUSH	2
56	716-0484-00	SCREW *M2X2.25	13
57	716-0761-01	SCREW	2
58	716-0833-10	AZIMUTH SCREW	2
61	746-0624-00	WASHER	2
62	746-0724-00	WASHER	6
63	746-0761-00	WASHER	2
64	746-0762-00	WASHER	1
66	750-2946-02	PINCH-SPRING	1
67	750-2947-01	EJECT-P-SPRING	1
68	750-2949-00	SLIDE SPRING	2
69	750-3017-01	IDLER-P-SPRING	1
70	074-0881-08	OUTLET SOCKET *8P	1

◎EJECT SUB ASS'Y 960-4298-02



◎BOTTOM SUB ASS'Y 960-4296-02



NO	PART NO.	DESCRIPTION	QTY
1	960-4267-11	EJ-PLATE ASSY	1
2	960-4297-02	EJ-FRAME ASSY	1
3	960-4308-00	SWING ARM-ASSY	1
4	630-2627-02	SWITCH PLATE	1
5	750-2948-00	SW-PLATE SPRING	1

NO	PART NO.	DESCRIPTION	QTY
1	960-4295-02	BOTTOM P-ASSY	1
2	099-9548-00	FLEXIBLE PWB	1
3	013-3951-00	SWITCH *MODE SWITCH	1
4	013-3953-00	SWITCH *METAL	1
5	051-1114-03	IC NJL5161K-P	1
6	746-0767-00	WASHER	2